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SUGGESTIONS FOR THE SEASON.

The Homestead — The Cellar — The Garret — The Sink — Application of Manures — The Garden — The Orchard.

In pursuance of our design to adapt this Journal to the times, with special reference in each number to the work to be done within a few weeks of its issue, we propose to devote much of this number to spring manuring, the preparation of soils and the getting in of crops.

As many of the subjects of which we should naturally speak under this head will be treated in separate articles, we shall omit them here, or only allude to them in a very general way. We beg our readers to consider that the spirit with which we write is that of suggestion and not of dictation. If any thing from our pen has the appearance of the latter, it is only because we wish to speak briefly. When we say, do this, or do that; do it this way, or that; do it now, or some other time, our meaning is, do it, and do it how and when we say, if in the exercise of your own judgment, and with a better knowledge of all the circumstances in your case, than we can possibly have, you think best. To insert this proviso in all cases, would use up too much of your paper and too much of your time. But it is always in our mind, and we wish our readers to consider, that the following suggestions are made with this spirit, as to thinking men, who will weigh every word, and decide for themselves.

Beginning with the homestead, and with the most important part of that —the house of an American Lord, and would that we may never have other lords than of the soil they cultivate— and then going to the bottom, let the air sweep through the cellar, having an entrance one side and an egress the other. Clean out every particle of foul matter. Particularly let no decaying vegetable matter remain to breed fevers. A perfectly clean cel-

lar, the windows open from March to December, and the door from the family rooms to it shut at all times, is the first item towards a healthy house. If the stairs are not sloped properly, if they are not firm, of a regular descent, easy to pass up and down, in the prosecution of the female labors, make them so at once. It may cost a little, but it will be cheaper than to pay doctor's bills; and you know that when the women are brisk, healthy and cheerful, we always have better times.

The next stories will be kept nice of course. They are the peculiar province of the ladies, and it would not be gallant to suspect them of untidiness. But that garret—it sometimes slips between the supervision of men and women and gets neglected by both. See to that. Let the duds be repacked, and the garret swept and ventilated. Slaternliness in the garret is not equally a foe to health with slovenliness in the cellar, the first giving only a slight tendency to disease, the other strongly inviting its attacks.

But besides the cellar, there is another lurking place for disease. It is the sink. So much as is in-doors falls to the women, and we feel inclined to answer for them. But what is outside falls more appropriately to the wearers of pants than of crinoline. See that the sink trough is kept as clean as possible. Let this be often looked to. It is well to throw a little plaster about the sink, where it issues from the house, and to use plenty of swamp muck or coal dust, in the reservoir or tank into which it flows, and this should be as far as may be from the house, as in that case large quantities of fertilizing matter can there be prepared for the land.

Going a little further from the house, see to the pig pen, the vault, the barn-yard. The farmer cannot afford to leave even the chip-yard uncleansed. Aside from all considerations of neatness and of health, his fields crave these smouldering substances, soon to ferment by the returning heat of Summer, which, if left about the homestead, instead of being made to enrich the soil, become offensive and injurious to health. There should be a universal cleaning out and cleaning up between now and the 10th of May. If there is any man who can afford to disregard this rule, it is not the farmer. The soil is the great purifier. Its office is to swallow whatever impurities come in contact with it, and to give them back in the form of grasses, cereals, vegetables and fruits. It has ever seemed to us best where no special reason exists for the contrary, as we know there does sometimes, to apply all the manures of the farm in the Spring. In this way you get the return in six months, whereas if they lie over you have to wait three times as long.

For top dressing grass land, there is a most decided advantage in composting green manure with cured muck, leaf mold or something of the kind, and fermenting it, that it may crumble more finely and more readily incorporate itself with the surface soil. For plough land this is important also, but not equally so, for in this case every particle of soil becomes a divisor and an absorbent for the manure. But let us add here

that in order to bring out the full effect of the manure on the crop, it should be spread evenly, and, after being plowed in, mixed more evenly with the soil, by means of the harrow or cultivator, than is usual. The cost of this extra labor is of course to be taken into account. The result will be that each of our readers will act on his own judgment, and ten will be losers by not incorporating the manure sufficiently with the soil for every one who will miss the figure by bestowing more labor than is wise.

Grafts should have been cut in February or March. But if they were neglected then, better late than never. If you cut them now, and keep them in a dry, cool place, they may yet be in good order at the time for insertion in May. Do not fail to let every year witness some improvements in the way of choice fruits. Can any possible reason be given, why every man who owns an acre or more, up to the largest farm, should not have plenty of fruit for his family and some to spare?

Be a little indulgent to the boys, as they come from school and commence the summer campaign on the farm, aye and a little to yourself. April, we have sometimes thought, is the hardest month in the year. There is a sort of acclimation, one has to undergo, which to us used to be more trying than any other month. Teams should be well kept and worked with discretion at this season.

On the important matter of a garden, we said so much in our last, that more seems unnecessary. But let us add; deepen the soil if you have not done it; underdrain, if necessary; manure heavily; and do not fail to have a garden that you will be proud of, and that will be an ornament to your home, and a source of profit.

Now is the time to be setting out fruit trees. If you have been neglectful of the orchard, "turn over a new leaf" from this time. In transplanting young trees, dig the holes large, set the tree at about the same depth it before stood; cut off the ends of any roots that may have been mangled smoothly with a sharp knife; use very little water—none if the ground be moist,—and mulch the surface to keep a steady moisture and an equable temperature, remembering that one tree, properly set and taken care of, will give more fruit than a dozen carelessly stuck down and left a prey to every destroyer. If there are bones on the premises, of which you are not going to make a better use, break them coarsely—finely if the labor be not too great—and put them in the soil around the fruit trees you are transplanting.

Trim the suckers from about the roots of the old trees and thin out the tops if very thick, but be cautious of mutilating the tree by cutting away large limbs. We read of "digging about trees and dunging them;" and although the book in which this is contained was not given to teach horticulture, its teachings in this particular are good.

An old apple tree that has been standing long on turf land has most of its roots near the surface. It is a good plan to ascertain by digging how far its roots extend, and then at that distance from the trunk, ten, fifteen, or twenty feet, to dig a trench around the tree, so as to cut off a few

of the extremities of the roots, and to fill it with rich earth and a mixture of well rotted manure, with lime or ashes, or both. Rootlets will spring from the old roots, will permeate this newly trenched and manured soil, and the tree will be renovated.

Almost any farmer would contrive to do this trenching with a plough at a much cheaper rate than with the spade. Three or four times around with a stout pair of cattle and a large plow would answer the purpose of opening the soil and mixing with it manure, ashes, lime, old bones &c., as pabulum for the new roots. The earth might then be turned back with the plow, and harrowed and rolled smooth.

Any rough bark on the trunks of old fruit trees should be scraped off with a hoe, or other tool convenient for the purpose. It is well not to wound the green bark in the process. The trunk and lower limbs should be washed at this season, or a few weeks later, with ley. It may be made by dissolving a pound of potash in twelve quarts of water, or by leaching ashes in the usual way, but must not be strong. Trees have been killed by a solution of a pound of potash in a gallon of water.

The effect of a weak solution of potash is, to cause the decaying bark to cleave off from the green bark beneath it and to leave the trunk in a smooth healthy condition, and if not wholly to destroy insects, at least to break up their lurking places and prevent the tree from harboring its own destroyers.

INDIAN CORN.

Its Value in 1850—*Increased Cultivation since—How much will be grown in in* 1859*?—Corn Starch—Yield of corn to the acre.*

In the census of 1850, the four most important crops are valued as follows :—

Indian Corn,...	$296,000,000
Hay,.....	138,000,000
Wheat,.....	90,000,000
Cotton,.....	78,000,000

There most have been a large increase in these productions since 1850, and their relative values may have varied since that time, but the above figures show the very great value of the corn crop to these United States.

Mr. John Jay, of this city, in a recent lecture before the Geographical and Statistical Society, stated that in 1840 the corn crop amounted to 400,000,000 bushels; in 1850 to 600,000,000 bushels; and in 1856, to at least 800,000,000 bushels. By this it would appear that it had doubled in sixteen years, and that for the last six years the increase had been 33⅓ per cent., or 5⅓ per cent., annually. At the same rate of increase it would amount to about 1,000,000,000 in 1860.

Land equal to the production of at least 900,000,000 bushels, in case of an ordinarily favorable season, will be planted with corn in the next few weeks. It appears by the census reports for 1850 that the yield of that

year was 592,071,000 bushels, from 31,000,000 acres, averaging a fraction over 19 bushels an acre, and worth, at 50 cents a bushel, $296,000,000. Should the crop this year be 900,000,000 bushels, and the average yield 25 bushels an acre, it would require for its growth 36,000,000 acres—about an acre and a fifth to each person, or six acres to every five persons.—Whether precisely 36,000,000 acres will be planted, is of little consequence. It will be more likely to exceed than to fall below that number; and the crop, should the season be favorable, will go beyond rather than fall short of 900,000,000 bushels.

That Indian corn is a native of this continent, that America gave it to Europe, and not Europe to America, has been disputed, but the question may now be regarded as pretty nearly settled in favor of the New World. Baron Humboldt says: "It is no longer doubted among botanists, that maize, or Turkish corn, is a true American grain, and that the old continent received it from the new."

Indian corn seems destined, either directly, or by its conversion into meats and dairy products, to furnish a large proportion of our food. The starch for our manufactories and laundries is now made largely from corn. Instead of importing starch as formerly, we are now exporting it largely. The Messrs. Duryea, at Glen Cove, near this city, have a starch manufactory, capable of producing eighteen tons of starch daily, from about twice that weight of corn; and we learn that a considerable portion of this goes to Europe. Other establishments are turning out a similar article; and there can be hardly a doubt, that corn, either kiln-dried for the purpose, or reduced to corn starch, will hereafter be among our most important exports.

A kind of corn starch, manufactured in a way to retain the nitrogenous elements of the grain, under the names of "farina," "maizena," &c., is becoming a common article of food both for home consumption and for exportation; and whatever view we take of the subject, the value and importance of the corn crop are made to appear.

It is worthy of remark, that corn, although a tropical plant, requiring great heat, is also a rapidly growing and quickly maturing plant, wherever heat is supplied, and will flourish, therefore, in any country where there are three or four warm months with a dry atmosphere. This peculiarity fits it for a wide range and adapts it especially to our country, where the summers are warmer and dryer than in countries of equal average temperature on the eastern continent.

To the northern countries of Europe the turnip crop is of immense value. England could hardly exist without it. The cultivation of this and other root crops, particularly the carrot, may become increasingly important to our country. We incline to the opinion that it will. Old prejudices are wearing away, and the value of roots as succulent food for cattle, and especially of carrots for horses and for milch cows is becoming better understood. But root culture can not become as important to us, as to England, for the reason that our climate is admirably adapted to the more valuable crop, Indian corn, which her's utterly refuses to grow.

The increasing cultivation of the corn crop renders it vastly important that the best procedures should be adopted We have seen that in 1850 the average yield for the whole country was but a trifle above 19 bushels. Perhaps twenty-five bushels an acre is as much as will be realized the coming season. It ought to be fifty. If the point of maximum profit were attained, the yield would in no case be less than fifteen bushels, in many it would come up to a hundred and fifteen; and the average would be fifty at least.

We shall probably be blamed for naming fifteen bushels to the acre, as a yield, with which any one should be contented, even on the poorest land. We will defend our position in another place; and in doing so we will not be guilty of encouraging nor even of apologizing for a low, skinning process, nor will we say a word inconsistent with our oft repeated and urgent calls upon the farmer, to aim at a higher cultivation and larger crops than have been usual.

What should be aimed at in farming, is, to put every acre to the best use, in view of its quality, its location, the facility for applying fertilizers and a score of circumstances known only to the owner himself.

YIELD OF CORN PER ACRE.

High Cultivation—Circumstances to be taken into account—Fifteen Bushels better than nothing—Thirty Bushels and more—Sixty Bushels and upwards — Corn-Growing Profitable—One Hundred and Twenty Bushels and more.

Any acre of land, in a good corn latitude, which, *on this continent*, is from 43° southward, we know not exactly how far, can be made to produce a hundred bushels of shelled corn. We mean that this is possible. Pledge the cultivator full pay for cultivation and a margin of $50 an acre for profit, with backers to pay, if the crop does not, and we shall see it done. But leave him, as is the way in farming and always must be, to depend on the crop for pay, and it will not be done. We are speaking of the *possible*, not of the *practically wise*, when we say our poorest acres can be made to give a hundred bushels; and while we say this, we say that there are acres on which it is wise to aim at no more than fifteen or twenty bushels, say fifteen as the minimum. Our faith stops there. We cannot believe in less, and are willing to set down the man who gets less than fifteen bushels, as a miserable farmer, who has mistaken his profession—one of the *Slows*.

Fifteen or Twenty Bushels per Acre.

"Pshaw," says an old, well tried friend of ours, "don't encourage such a skinning course; say fifty bushels at least." But let us see. You have a good farm at home. It takes all the manure and all the labor you care to bestow, and it pays well. But, fortunately or unfortunately you have a ten acre plain lot over between your town and the next, three or four miles from your homestead. Now

whether you might not have better sold that land long ago, or given it away, is none of our business. Possibly it might better have been growing a little pine or oak fuel. All we know is, that it was in rye half a dozen years ago, that it then gave a little feed a year or two, that it is now passibly well fenced and is giving nothing. It seems you either *will* not or *can* not sell it, and there it is unproductive, and yet costing you something every year for taxes and fencing.

Our friend aforesaid, would tell you to carry on fifty loads of manure, and force that land into a high productiveness. But he does not stop to enquire whether you have so much manure, or how long it would take for your teams to haul it so far, or whether every load would not give you a better return within fifty rods of your barn. The fact is, he has not learned the A B C of farming, or he would bandy no such advice.

If you oust him from the fifty-load-an-acre plan, he will be at the Chinchas in no time and have you there with him. Five hundred pounds the acre of that birds' dung, as it has been mistakenly called, will require only two and a half tons for your field. One hundred and sixty dollars, in advance of your crop about six months —say thirty-five dollars for the Peruvian Government, sixty-five for the benefit of merchant princes, whose ships would have to return empty if the farmers should not shell out liberally, sixty dollars for magnificent profits, somewhere along seventy-five dollars for charges that will be fixed upon you before you get through. But you do not like the smell of guano well enough to go that figure. Our good friend will hoot us here, jolly, well-meaning fellow as he is, because we do not chime in and tell you to order the guano at once. But we can't help that. There's your land; you have concluded to expend your manure and your labor mostly on the home lot; but you think you will plow up that out-of-town field, try it with corn, and then rye, and see if it will not give a little grass for a few years. Now we will hint at the best way of doing this; and if the aforesaid friend, or any other, accuses us of encouraging a skinning process, he only shows bis unfairness; for we do not advise to grow corn and rye there; we only say, if you do it, the following is as good a way as we know of.

We will suppose the soil to be a thin sandy loam on a coarse grit. We will suppose also that there is no green-sand near it, for if there is you might better douse it on and grow two or three hundred bushels of potatoes; or if there is swamp muck at hand, you should compost it with barn manure, ashes and lime, and get much larger crops than we are talking about. But on the supposition that none of these fertilizers are at your command, and that the land is as we have described, we would say:

Plow five or six inches deep; harrow in a hundred pounds of the best Peruvian guano to the acre. We hate to advise this course when we know that half your money goes, not to pay our second cousins in Peru, nor for necessary cost of transportation and agencies, but exorbitant profits; and yet we see not how you can do better, for if you resort to

cheaper fertilizers, unless you make them at home, you will only get worse cheated. One hundred pounds then of the best Peruvian, at just twice the price it ought to be, to begin with. Then we would add leached or unleached ashes, if you can get either, at an expense not exceeding on the ground fifteen cents for the leached and twenty cents for the unleached, say ten bushels to the acre, and three or four times that amount if you can get them, expecting fifteen bushels of corn to the acre, with the smallest quantity of ashes named, and with the largest, something over enough to pay for the extra cost of the ashes.

Such a field should be planted with a medium sized corn, four feet apart each way, and the labor of cultivation be done with the cultivator and horse hoe. The crop, taking into account the value of the stalks for winter forage, would be likely to pay, and leave a small profit over and above the cost of labor and manure. If you sow rye in September and seed to grass, adding another hundred pounds of guano to the acre, you have a chance for a small crop of rye, say eight or ten bushels to the acre, and a little feed for two or three years.

Now let no one say that we counsel such a skinning course, unless it be where you can do no better. If such land lay in Southern New Jersey, within ten miles of a marl pit, the way would be to bring it into high productivness at once, because that fertilizer would do it, at a cost, which the crops would be certain to meet and leave a handsome profit.

Or if there were plenty of clay, or swamp muck, at hand, and especially if both these abounded, it would be worth while to compost a little barn manure with these, to add lime and ashes, and force it into a permanently productive condition at once. If a small tract of such land be near the homestead, the true policy is to change its whole character by additions of clay, muck, leaf mold and manure, till it will produce as good crops as other lands, and be no longer a blot on the farm. How common it is to see a knoll, in the midst of an otherwise beautiful meadow, remaining unproductive for a lifetime, when the exchange of a few loads between that and the adjoining land would amend both.

Our conclusion is that when poor, sandy and gravelly land is far from the homestead and far from the materials to give it compactness and fertility, you may treat it in a way, that would otherwise be called a miserable, skinning process, without reproach, 'till some one can tell you what you can do better with it.

Thirty Bushels or more per Acre.

Land of a little better quality, but inferior to what are usually denominated corn lands, if situated near the homestead, within the range of the farmer's ambition, and where heavy manures may conveniently be applied should not be cultivated with a view to less than thirty bushels of corn to the acre, and other crops in proportion. That two or three times that amount can be grown on light loams, easy of cultivation, but not naturally strong, is clear from examples herein to be adduced. We name thirty bushels as the minimum for such lands, and we believe that the farmer,

who grows less, falls below the point, at which the clear profit is the largest.

But in our apprehension, the way to treat these lands is not to give a very great quantity of uncomposted manure, forty, fifty or sixty loads to the acre, as is often recommended. The effect is to deprive better lands of their fair proportion, and without as good a return as can be obtained from stronger soils. If asked how we would cultivate such land, with a view to thirty bushels of corn to the acre, and upwards, to forty or fifty for a first-rate season, we would say:

Turn over the turf to a depth of ten or twelve inches. This may be done in the Fall or Spring, better we are inclined to believe on such land in the Spring. On this we would spread thirty loads of a compost prepared from ten loads of barn manure previously fermented with swamp muck, leaf mold, scrapings from the road side, or something of the sort easily obtained in the location, with a few bushels of lime, to hasten the fermentation of the manure, and thus to prepare it to act promptly on the soil. A few bushels of ashes would be a valuable addition, and would increase the crop more than enough to balance the cost of the ashes, at any price we have known to be asked for them.

To the mixing of lime with green manure in such a compost there is not the least objection, as the composting materials will retain the ammonia, which might otherwise be driven away by the lime. The compost should be spread evenly on the surface and harrowed in, or worked in with the cultivator, or with a small plow, run so shallow as not to disturb the turf. Let the compost be thus applied when warm with fermentation. It will act like yeast to the soil, warming it, and aiding thus the germination of the seed. It is of considerable importance to time the whole business so as to apply the compost and plant the seed at the same time. Careful observation has convinced us that the best time to plant corn is when the ground has become warm enough to bring it up quickly, and when the season is sufficiently advanced to afford a reasonable expectation that the plants will grow on as soon as up, without a stint from the cold; and we would not plant till that time had come, nor delay at all after it, if it could be avoided. From the 15th to the 20th of May is oftenest the best time as far north as New York. But the skilful cultivator will look otherwhere than to the almanac to know when to plant corn.

We believe that in a light soil two inches is deep enough to cover the seed, and in a heavy soil, one inch is better. Four and five kernals in a hill, rows and hills four feet apart, is right in our opinion. Some would plant as closely as three feet in the rows, and hills two and a half feet apart. If the kind of corn be very small, the rows and the hills should certainly be nearer; but we can see no reason for planting dwarf corn, except in frosty regions far to the north; and certainly the large kinds should not have much if any less than four feet each way.

Land treated as we have described —plowed deeply, the turfs undisturbed by after cultivation, manured

by a compost in which all seeds may be supposed to have been destroyed by fermentation, rows running perfectly straight one way, and if both ways all the better, is kept clean with wonderful ease, and in case of a medium season will give thirty bushels to the acre and upwards; and the land will be improved for after crops.

Sixty Bushels or more per Acre.

How such crops have been obtained, and of course may be again, we will show in a more practical way, by condensing statements, which we find in the Reports of Agricultural Societies.

Mr. Albert Montague, Hampshire Co., Mass., on an acre of sandy loam, in broom corn the year before, with a surface dressing of manure, broom corn light, not more than six or seven hundred pounds, carted for the corn crop fifteen loads of coarse manure from his yard, and plowed it in. He plowed seven inches deep, next day harrowed fine, furrowed with a small plow, put in the furrows 100 pounds of guano, and planted with Woodward's planter, rows and hills three feet apart, not a hill missing. One kernal produced fine ears, three on the seed stalk and two on suckers. He hoed three times. Corn out Sept. 24th, carted and husked October 31st, 93¼ bushels of shelled corn, 7,200 lbs of stover, the whole worth $116.60, cost $37, net profit $79.60, by his estimation.

It is almost needless to say that we believe Mr. Montague underrates the cost of cultivation, and thereby brings the net profit too high. Corn growing in that region, and in the hands of such a farmer, is profitable as we have occasion to know, but we think does not often return the investment with 200 per cent. profit, and more as Mr. M. has it.

Franklin Arms, of Conway, Franklin Co., Mass., on one acre of substantial loam, after a good crop of potatoes, with five loads of compost for the potatoes, applied for a corn crop twenty loads from the sheep and barnyard, spread and plowed under deep, and then top dressed with ten loads of compost thoroughly harrowed in; planted with what is called the leaf corn, three feet each way, five to seven kernals in a hill, thinned to four at the second hoeing; hoed June 10th, June 20th and July 8th. Produce 99 bushels, 3 quarts, 1 pint. Value of crop $103.75 cents; cost of cultivation $55.15; profit $48.63.

In that part of the country, the soil is a strong loam, formed from mica slate. It is strong and hard to cultivate. The true policy of the farmer there is to grow a small field of corn, but to make it give a heavy crop. Not over ten miles from Mr. Arms are out lands, on which it is just as clearly the true policy to cultivate a large field, to manure lightly and be contented with fifteen or twenty bushels to the acre. In one case, whatever manure is put into the soil will "stay put;" in the other it will go skywards. In one, the land is worth five times as much as in the other. In one it costs as much to cultivate one acre well enough to get a very large crop, as to cultivate five acres for a small crop in the other. If the farmer in Conway wants a hundred bushels of corn, we can see no reason why he should not *make* one acre produce it; while the farmer of cer-

tain plain lands but a few miles from there we think does well to *let* five or six acres produce the same.

Mr Arms estimates his manure at $1,00 a load. The *load* in that State means a third of a cord, or about thirty-four feet. We know Mr. Arms well, and if we had gone to him and tendered $30 for the manure he used on that acre, we suppose he would not have touched the money, because he is one of those farmers who know what they are about. It is an olden practice in that State to estimate manure at $1.00 a load. Mr. Arms fell into the old practice of estimating his at $1,00. It is really worth more, and therefore if he had put it down at the lowest point, at which he would have sold it, his estimate of cost whold have been rather higher than he has made it.

Samuel W. Bates, of Plymouth Co., Mass., reports 113 7-17 bushels of corn from one acre. Land in potatoes previous year, without manure. Carted from his barn cellar, May 1st, five cords (15 loads) of manure, spread it and plowed it in six inches deep. Ten days after, spread 100 bushels of leached ashes, 150 pounds of guano, and three cords of compost from hog-yard, and harrowed it.—Furrowed one way, six furrows to the rod. Planted May 23d, with Whitmore corn, twenty inches apart, three kernels in a hill. Estimated expenses $14.50, nothing set down for manure.

Profits of Corn Growing.

Why should Mr. B. omit the worth of manure? Of the kinds he used, two-thirds at least would go to the corn crop, and not more than one-third remain for after crops. Of the manure used by Mr. Arms, as by last statement, more than half would remain in the land. Mr. Bates does not estimate the value of his crop. The corn and straw must have been worth about $120. But there is no use in holding up that he gets $120 for $14. If his costs were not over $60, he made a profit of 100 per cent., which surely is doing pretty well.

Nearly all Massachusetts farmers say, "there is no profit in corn growing." They say, "we only get pay for our labor." And yet their statements show a profit of all the way from 50 to 200 per cent., and Mr. Bates goes even far beyond the last. The truth lies somewhere within these wide extremes; and we will venture the assertion that the farmer in that State who understands his business and practices it in a business-like, energetic way, can grow corn—can hire the money for the purpose if he needs—at a net profit of from 33 to 66 per cent., varying of course with the seasons and the markets; and if so, it is a good business, and those farmers who are always complaining of "no profit" are ungrateful, while those who make statements, indicating two or three hundred per cent. profit, are visionary. There is no great difficulty in producing upwards of a hundred dollars' worth from an acre of good corn land, but then you cannot do it for $14, nor for $39, nor, ordinarily, we believe, for $55. If you can for two-thirds the value of the crop, it is a good business.

We find by running over these reports, as published in the transactions of various societies, that pretty deep plowing, high manuring, thorough cultivation, and crops of sixty bush-

els an acre and from that up to a hundred and more have paid a handsome profit, and that too, after making big grains of allowance for the tendency to under-rate the cost, to over estimate the crops, and make a large story.

We find, also, from our intercourse with farmers, that a lower cultivation, with crops of from thirty to sixty bushels, pays a profit, though a less one. That "no profit," so often heard from some farmers, is only a stereotyped murmur at their own calling.

And we find, withal, that on the out-of-town plain lands a still lower cultivation and a crop of only fifteen or twenty bushels the acre pays, several instances having come to our knowledge of men buying these lands, paying all costs of cultivation and paying for the land out of the first crop. Corn growing then is and will be a good business, though not as extravagantly so as the statements of some men at our agricultural gatherings indicate.

One Hundred and Twenty Bushels and More.

We think we have seen statements of corn crops in Kentucky and other Southern States, approximating two hundred bushels to the acre, but cannot lay our hands on such at this moment. We content ourselves with the following statement of J. C. Clements to the Maine State Agricultural Society, published in their transactions. To our mind it shows that very large crops may be grown without such increased expense over ordinary cultivation, as to eat up all the profits, though we have long believed that on even the best corn lands, crops of eighty to one hundred bushels may be grown with quite as much clear profit, as larger. Mr. Clements says:—

Mr. Noyes of Bangor read the following statement of J. C. Clement, giving his method of raising the one hundred and twenty-five and a half bushels of shelled corn to the acre, for which the first premium was awarded at the late State Fair held at Bangor:

"KENDUSKEAG, Jan. 9, '58.

"*Dear Sir:*—As I have had quite a number of applications for my seed corn, from persons wishing me to write out my method of preparing manure and ground, and also my method of planting, I make to you the following statement of facts:

"If I would grow a large crop of corn, I select a good warm, dry piece of land, spread about half the manure on before plowing, say four or five cords to the acre, putting the remainder in the hills. I prefer to plow four or five days before planting. A few hours before planting I have the ground levelled with a fine tooth harrow. I then furrow with a large seed plow to the depth of ten inches, the rows three feet apart, and running north and south, leaving two feet between the drills. I then cover the manure as soon as possible after being dropped in the hills, with one inch of loam, and press it down hard with the foot. The corn is dropped three or four kernels in each hill, and covered an inch and a half deep, leaving the ground as nearly level as possible.

In 1855 I tried an experiment which I found to be a good one. I filled a furrow with manure and planted it six inches apart, for the purpose of supplying vacancies made by the crows, which are very likely to visit our corn fields and take their part. They visited mine in 1855, and pulled up about a hundred hills. I found it out soon after it was done, and took the first damp morning to

dig out the manure where the corn was missing, and then with a small shovel took these hills which were in the furrow six inches apart, running the shovel below the roots and manure, and then placing it carefully in the missing hills, and pressing it down. In one week it could not be distinguished in appearance from the others; and if it is not needed it is very easy to pull it up.

"I have a vat in my barn that is water tight, which is ten feet deep, twenty-one by thirty-two feet square, where my compost is made. Directly after planting, I haul in from ten to fifteen cords of muck into my vat. I winter several hogs, which have access to this vat, and are continually working it over for the purpose of getting the corn I occasionally throw in, and are thus made nearly to pay their keeping. The privy, and also the hen roost are placed over the vat, into which my sink drain also runs. The dropping of my horses, fifteen cattle, and twenty sheep, fall into the vat, and I occasionally throw in plaster, ashes and salt, which constitute the manure I use for my corn. I consider this compost worth more than double that made in the old way, and have good reasons for thinking so; for when I used the old manure, that had been exposed a year or more, I seldom got more than fifty bushels of corn to the acre, whereas, by the present method, I raised in 1856, one hundred and seven bushels of good sound shelled corn on one acre, and last year I raised one hundred and twenty-five and a half bushels of good corn, as measured by disinterested men.

"My corn is of the eight-rowed variety. It was brought from the Western part of the State, about ten years ago, by Captain J. Chase, of Frankfort, whence I obtained mine, which I call "Chase" or "twin corn," and which I have been planting and improving for six years past, by selecting the best and earliest ears, and those that bore two ears on one stalk, which I think is extra seed. This corn has taken premiums the past three years. It ripened in three months and a half from planting.

J. C. CLEMENTS."

BREEDS OF CATTLE FOR DAIRY PURPOSES.

In the report of the Secretary of the Maine Board of Agriculture, for the year 1858, a valuable document just from the press, we find a somewhat lengthy and, to our mind, most sensible discussion of the above subject.

The Secretary, Stephen L. Goodale, Esq., fully recognizes the superior excellence of many among our native cows for the dairy, but does not conclude, as some appear to have done, that we are well enough off in that respect, and so should let well enough alone, but gives an earnest inquiry for what may be still better.

We commend Secretary Goodale's remarks to the special attention of Maine farmers, and especially to all breeders of net cattle; and we here condense a few of them for our readers.

Natives.

No better cows for the production of milk can anywhere be found than some among our native stock. Yet these do not deserve the name of a breed, and still less of a race, having no distinctive marks or fixed traits

which descend to their progeny with an approximation to certainty, it is evident that they cannot be relied on to furnish a definite and sufficient number of desirable milkers. By judicious selection of a small proportion, a dairy might be established in which the cows would yield a return double or even treble what an equal number of the rejected ones would do; and were the skill, energy and perseverance of a Blakewell devoted to the purpose, there is no doubt whatever that a dairy breed, or a working breed, or a breed for early fattening, or one embracing so far as compatible all three, could be produced from these alone with no future introduction of foreign blood, and such a consummation is worthy of earnest and patient effort, but as this is not yet accomplished, and will require many years of labor if it ever be, we are restricted in present efforts in improvement to selection from among the best of such as we have, or resort to introduction of foreign breeds to be kept pure or crossed with native stock.

Imported Breeds.

If we examine critically such as have been most largely introduced into the State, we find them to have been bred with reference to early maturity, to beef and to labor, rather than for the pail, and they are, on the whole, better adapted to the yoke and the shambles than to the dairy.

The Durhams or Short Horns.

These have been more extensively introduced than any other, and were bred with special and almost sole reference to the production of beef; hence size, symmetry and early maturity were aimed at, and the eminent success which attended the effort is evidenced both by the enormous prices realized for many years for choice specimens, and by the fact that these desirable qualities were successfully imparted to our active and hardy native cattle by crossing, and the grades found useful and valuable for the general purposes of the Maine farmer.—Among the earlier introduction of Durhams into Maine, were some which possessed milking qualities beyond the average of this breed; and of the grades descending from these, inheriting in many instances a well-developed lacteal system from the native mother, were not a few which yielded largely of milk and of good quality. Mr. Haxton, a discriminating writer, remarks—"The Short Horn cow is everything that could be desired as regards symmetry and aptitude to fatten, but she is not a dairy cow in the strict sense of the term, and under the ordinary circumstances of food and climate she is not equal to other breeds inferior to her in every other respect, but when well fed, well housed and kept comfortable, she is not without merit as a milker.

A pure Short Horn cow, or even a three-parts bred one, is an unprofitable animal for a butter or cheese dairy, not merely because her milk is usually deficient in richness, but because of the delicacy of her constitution. In the English dairy counties the cows are generally allowed to pasture in the fields both in Summer and Winter, and in consequence of this being the prevailing custom, it is an essential qualification that they be of a hardy constitution. Now the Short Horn cow can neither withstand cold nor heat, nor sudden transitions of temperature, without suffering injury; in the former the flow of milk is arrested by the expenditure of the food in maintaining the vital energy, (which is below an average in all animals of a lymphatic temperament,) and in keeping up the natural heat of a carcass very large in proportion to the vital organs.—Great heats or sudden alterations of temperature are also found to act very injuriously on her milking properties in consequence of their weakening effects on a constitution not naturally the most robust. Of course these causes are also injurious to other breeds of dairy cows, but much less so in consequence of their smaller carcass and hardier constitution.

Few dairy farmers would ever think of purchasing a pure Short Horn cow, and it is questionable whether, for them, any advantage is derived even from an infusion of Durham blood; but to milk dairymen who practice house feeding with abundance of rich nutritive food, few animals will pay so well as a cow with a large proportion of Short Horn blood in her veins, as she will accomplish what few other cows can, namely, make both milk and beef at the same time."

North Devons.

Of the North Devons, which are rapidly becoming disseminated throughout the State, the Secretary of the Massachusetts Board of Agriculture says: "they are remarkable for hardihood, symmetry and beauty, and are generally bred for work and for beef rather than for the dairy. The proportion of meat on the valuable parts is greater, and the offal less, than on most other breeds, while it is well settled that they consume less food in its production. As working oxen, the Devons perhaps excel all other races in quickness, docility and beauty, and the ease with which they are matched. With a reasonable load, they are equal to horses as walkers on the road, and when they are no longer wanted for work they fatten easily and turn well. As milkers, they do not generally excel, perhaps they may be said not to equal the other breeds, and they have a reputation of being decidedly below the average: but this is probably owing to breeding, in particular families. In their native country, the average of a dairy is one pound of butter per day during the summer. But though the Devons generally are not noted as milkers, yet I have had occasion to examine several animals brought from the celebrated Patterson herd, which would have been remarkable as milkers even among the best milking stock, and I am convinced that the reputation they bear as small milkers is due to the great anxiety which has often been manifested to breed, as it were, to order, in point of symmetry and beauty of form with a disregard to milking qualities."

It is universally conceded that the milk of Devons is of extraordinary richness, and second to none in this respect except the Jersey. It is said that a pound of butter can be made from nine or ten quarts, and that in some rare instances, it has been made from five quarts, while milk from the average stock of the country yields but a pound from fifteen or sixteen quarts.

Were it possible to add to the other qualities of the Devons uniform milking properties equal to what some of them are now know to possess, little more could be asked for in a breed designed for general use, and the success which has attended efforts thus far made to breed them towards milk has, so far as known, proved highly gratifying.

Herefords.

The Herefords, valuable as they are for the possession of the chief excellencies of the Durhams, connected with greater hardihood and the ability to thrive upon scantier fare, does not give promise of improving our stock for dairy use. When pure-bred, they are confessedly scanty milkers, and no attempts are known to have been made to improve them in this respect. Some of the grade cows, sired by the Hereford bull, which have fallen under my observation, were, however, better as milch cows than could be anticipated, if we are to believe, as some teach, that the male has predominating influence in determining milking qualities; for these, when from good milking cows, gave nearly as much themselves as did their dame, and of richer quality. The progeny seemed to have inherited the vascular system of the dam connected with an improved form and grazing qualities; but notwithstanding such instances, there is no claim made in favor of this breed, so far as my knowledge extends, even by its

strongest advocates, on the score of fitness for dairy purposes.

Ayrshire Cow.

As to their distinctive traits, the following is quoted from Professor Low:—

"The modern Ayrshires may stand in the fifth or sixth class of British breeds as respects size. The horns are small and curved inwards at the extremity after the manner of the Alderney. The shoulders are light and the loins very broad and deep, which is a conformation almost always accompanying the property of yielding abundant milk. The skin is moderately soft to the touch and is of an orange yellow tinge about the eyes and udder. The prevailing color is a reddish brown mixed more or less with white. The muzzle is usually dark, though it is often flesh-colored. The limbs are slender, the neck small, the head free from coarseness. The muscles of the inner side of the thigh, technically called *the twist*, are thin, and the haunch frequently droops to the rump—a character which exists likewise in the Alderney breed, and which, though it impairs the symmetry of the animal, is not regarded as inconsistent with the faculty of secreting milk. The udder is moderately large without being flaccid. The cows are very docile and gentle, and hardy to the degree of being able to subsist on ordinary food. They give a large quantity of milk in proportion to their size and the food they consume, and the milk is of excellent quality. Healthy cows, on good pastures, give eight hundred to nine hundred gallons in the year, although taking into account the younger and less productive stock, six hundred gallons may be regarded as a fair average for the low country, and somewhat less for a dairy stock in the higher."

Improved Jersey Cow.

The improved Jersey cow (sometimes miscalled Aldernay*) is remarkable in many respects, and very diverse opinions have been and are still held among breeders regarding its merits. Most English writers in years past describe the breed as ill-shaped, great eaters, and on the whole unprofitable, although extraordinary richness of milk is universally conceded. But from the best information I can gather, there have been great improvements effected within the last thirty years, and that they have rapidly risen in favor both in this country as well as abroad, so much so, that Mr Flint, in his report for 1857, says that "the importation of Jersey cattle into Massachusetts has been more extensive within the last ten years than that of any other breed." Of late they have been introduced into this State, particularly into Kennebec, Penobscot and Cumberland counties, but too recently to speak with confidence as to their adaption to our climate and wants, either as pure bred or when crossed with our common stock. Some are very enthusiastic and liberal in their enconiums of the half-bloods, while others, less pleased, and preferring a more showy and symmetrical animal, have disposed of what they had.

For the farmer who desires to raise working oxen, they are both too small and have too much of a "game" look to be satisfactory. The dairyman who sells milk, can suit himself better than others, the milk of the Jersey being rich rather than abundant; but unsuited as they may be to the wants of the milk seller or the general purposes of the common farmer, there is no doubt of their ability to

* The term Aldernay applies more properly to the cattle of the Channel Islands genealrly, while in the Isle of Jersey special improvements have been made. They were all originally of the same stock, and introduced form Normandy, in France. Some eighty or one hundred years ago, Norman cattle were introduced into parts of Lower Canada, and we have in the States some of their descendents which bear resemblance enough to those introduced from the Channel Islands to mark distinctly a common origin.

supply one's own table with delicious milk and cream, and the richest and yellowest butter.

CAPITAL ON THE FARM.

That among us there is capital *in* the farm, that the farmer owns his land, controls it and has none to hinder, is all well. American farmers have the advantage over all others in this respect. But the business requires capital *on* the farm as well as *in* it; and in this respect, farmers in older countries have an advantage over us.

Some valuable improvement is to be made, as the clearing up of a swamp, the reclaiming of a bog meadow, or something of the kind, which will pay well and certainly—but not immediately. The landlord has money; he is willing, for three per cent., to fill with it the gap between the time of making the improvement and getting the pay for making it. The tenant knows that the improvement will give him much more than three per cent. on its cost. He therefore takes the money, makes the improvement, gets as much more than three per cent. as he can, pockets the difference, and praises the landlord, while at the same time the landlord praises him, and both are well pleased that the improvement was made.

Here it is too often the reverse of all this. Somewhere, perhaps not fifty rods from the barn, in the very place where the manure could be easily carried, is a great, unsightly and unhealthly bog meadow. Everybody knows that money well applied to its reclamation would give somewhere between ten and fifty per cent. for all future time, that the farm would look better, be better, produce more, sell higher, if that bog was—not out of the way, but made the best land on the farm.

The owner has not, or thinks he has not, the means to convert it into a meadow that would give him ten tons of hay, worth ten dollars a ton, instead of three or four tons, worth but the gathering. He has work enough that is more immediately profitable. He has a dislike—very just, it may be, but possibly a little squeamish—to being in debt, and so the old bog affords as good skating ground as it did when his grandfather was a boy, in Winter; the frog peep as noisily, in Spring; and the miasms are as foul in Autumn.

That almost every farm among us admits of improvements, that would, for an absolute certainty, pay well, every man in the least conversant with the subject must see. Look about you, and one of the first things you will see is a good farm, but not as good as it ought to be, not as good as a little money would make it. The owner values it, we will suppose, at $3,000. It ought to be worth $5,000. The difference, laid out on it in well directed labor, would make it return a larger per cent. on $5,000 than it now returns on $3,000.

It is one of the greatest discouragements to our farming that we have so little capital *on* the farm. Nevertheless, improvements are going on. Three thousand dollar farms, as estimated by their productiveness, are being converted into five thousand dollar farms, by the same estimate, and others are improving proportionally. And look where you will, it is made very plain, that as a

general rule, the farmers who are improving their farms—making them worth five or eight hundred dollars more next year than they were last—are not the ones who are likely to be sold out by auction. They are not the richest farmers in all cases, but they are the *thriving farmers*, those who, if not rich as compared with the successful merchant, are growing rich enough for all the sober, rational purposes of life.

While we lament the want of capital *on* the farm, we cannot but *gently* chide some, who could command it if they would, for what appears to us excessive caution, in the expenditure of money to make their land more productive. To snug away, with the merchant or some other person, or to invest in stocks, a hundred dollars at five or six per cent., or even with the hope of ten per cent., when with that money you could make an improvement on the land that would certainly give more than ten per cent., on land too that is your own, not for seven, fourteen, or nineteen years, as in England, but as long as you and your posterity choose to enjoy it, no crowned head, or titled lord to dispute your right, seems to us more cautious than wise.

Do not the facts, everywhere standing out, warrant you in employing capital in the improvement of your farms as boldly as is safe? We would not encourage rashness, but surely the want of capital—which all admit is a sore drawback to our farmers—should not deter from the rise of so much as can be commanded and be safely used on the farm.

Our own belief is, that money, invested in the improvement of farms, is safer than with any individual or corporation in the world. Your best neighbor may fail; the best bank may blow up, but your land never will be ungrateful for money expended on it.

SEEDLING POTATOES.

We copy from the *Journal of the New York State Ag. Society* the following Report of the Committee on Mr. Goodrich's seedling potatoes. It is not that we wish to advertize in our reading columns his or any other person's names. We know nothing of Mr. Goodrich, personally, having never seen him, nor heard of him, otherwise than through the papers, as one who has long been making patient and expensive efforts to produce new and valuable varieties of the potato, less liable than the old to the potatoe disease. As the Committee state that Mr. Goodrich has thus far been a loser, while the people have profited by his labors, it seems but reasonable that we should, in an Agricultural Journal, publish as we do in part, their opinion of his success, as well for the public good as for his. There can be no doubt that the potato, after long cultivation from the tubers, may be improved by obtaining new varieties from the seed. The Committee say:

The select committee appointed to examine several varieties of seedling potatoes, presented by Mr. C. E. Goodrich, Onedia county, who has, for several years, been propagating from the ball, with the hope of producing a better variety than we have hitherto raised, and with particular reference to quality, productiveness and prevention of the rot, after discharging their duty, beg leave to report:

That Mr. Goodrich presented to the

committee over one hundred specimens, produced from seventeen families and sub-families, being the basis of his experiments. That in the numerous specimens exhibited, almost all of them were fine in appearance, and of rather large size. The specimens that are most approved, are really superior, and form the basis of four varieties which are now ready for distribution by sale.

The committee beg leave to state, however, that having had no opportunity to test the different varieties, they take the recommendations of his correspondents, as presented to them, and shown in his communication.

Mr. Goodrich also presented nearly one hundred seedlings, originated in 1856, embracing those from very early to very late. He finds these later families producing much more proportionable number of good varieties than the earlier families did; because started from better bases. After the trial of another season, he hopes to throw a large number of valuable varieties into market.

The Committee were very much pleased with all the specimens presented by Mr. Goodrich, and he must have taken infinite pains to produce so many specimens, and always of such a fair appearance. It proves conclusively that he is not only an enthusiast on the subject, and from the length of time, beginning in 1836, that he has not only a taste for the cultivation of this plant, but by his perseverance, is well calculated, in the end, to give the most valuable varieties. The potato itself, entering so largely into the consumption of our people, it is all important, both to their health and their pecuniary profit, that even he, or some one else, conduct these experiments to the end if such be practical.

Mr. Goodrich, from his intelligence, his experience, and the innate love he has manifested for the cultivation of the potato, is, in the opinion of the committee, the proper person to whom this subject ought to be left. From his representations, which no doubt, are true, of his debtor and credit account, he is evidently a loser, (of which the people are reaping the benefit,) thus far, by his experiments. The committee would, therefore, recommend to their brother farmers, the purchase of his best varieties, and that the Society award him a gratuity of one hundred dollars.

Committee { C. N. Bement, J. P. Beekman. A. Van Bergen.

February 10th, 1859.

THE DRAINING OF SWAMPS.

A systematic thorough drainage of land, with tiles of from one to two inch bore, according to the length of the drains and the amount of water to be carried, to be laid four feet deep, a little more or less, as each case may require, and from thirty to eighty feet apart, as the character of the soil indicates to be necessary, is fast coming into operation.

Manufactories of drain tiles are being established in various places. The article is becoming better, as the makers of it gain experience in molding and burning it; and it will unquestionably become cheaper, as expedition in the manufacture is attained, and as competition, which is the life of business, springs up. Great extents of land, in our country—not the whole by any means, nor the largest part, but a large amount, in the aggregate—require a thorough systematic draining. They will receive it before many years; and the owners will not only be paid for the outlay, but a large profit will be returned.

In the mean time a practical good sense and sound economy will decide that other lands should be treated in

a cheaper way; that some, of which portions are wet, while other portions are quite dry, should be tapped with under-drains here and there as necessity dictates, instead of being systematically drained throughout; and that with regard to others, surface-draining, or draining by open ditches, may be profitably resorted to. Open ditches, it is true, are a blemish upon a farm; they cause serious inconvenience in the cultivation and removal of crops; and we would not commend such a mode, unless where good reasons seem to give it the preference, in a particular case. The following, which we take from the *Journal of the N. Y. State Ag. Society*, seems to indicate such a case, one where the main might better be an open than a covered drain, and where, perhaps, it was well to make open cross-drains, as an experiment, with a view to substituting covered drains at some future time, should it seem best. The writer, Mr. Kiersted, of Kingston, Ulster Co., N. Y., in speaking of his feat on swamp land, says:—

I have on my farm some eighteen acres of such land, most of it covered with roots and stumps, the surface very soft—cattle or horses could not go upon it, except we had a long drouth,, without becoming mired; so I, in company with a gentleman owning lands adjoining me, commenced digging a ditch some half a mile below, with a view of getting a sufficient fall to allow a sufficient depth of ditch to drain our swamp. We dug 110 rods through our swamp, in addition to the long distance below, to get fall, at an expense of 28 cents per rod, through the swamp, the first part done by the day; we each paid one half of the expense.

I then went to work and cross-ditched and drained some seven acres, (of which I had realized almost nothing, for the three years I have owned it, previous to this year,) plowed it with a lap furrow, the sward being water grass. After preparing in the usual way, for planting, the most of it, I put a small handful of horse manure in each hill, and covered it with the corn. I put in the *horse* dung with a view to warm the hill, and the experiment proved very satisfactory; the corn, where I put in the manure, grew so stout, most of it lodged, or went down; it yielded me some 185 bushels ears to the acre.

After preparing and planting to corn the piece mentioned, I took about five acres more—cut a ditch 4½ feet at top, 3 feet all round the piece, except the side where the ditch was first dug, then took off the muck, a coarse kind of mud, there was no turf whatever on it—a part of which I put in turnips, a part in cabbage and a part in buckwheat; the yield was very good considering the time I got them in.

Later in the season I took the rest of the lot, ditched that as I did the afore-mentioned——drawed out the roots and stumps, and have plowed the whole lot ready for planting in the spring. It is in most beautiful order, as mellow as ashes, or the most part of it. Much of the last named piece was covered with red raspberry and other bushes, but I have made clean work of them. I am confident I can raise a large yield of corn next year. The land for which I would have been glad to have been able to take $40 per acre, I now would not take $200 per acre.

The expense of ditching, 20 days lower end at 8s per day, one half I paid,	$10 00
To one half of 110 rods at 28 cents,	15 40
To 430 rods at 20 cents,	26 00
	$51 40

I have been in the habit of draining swamps for a number of years when I resided in Greene county, and always met with the best of success—made them the best and most productive of any of my lands.

I like open diches best—clean them whenever necessary. Swamps composed of peat or muck, should be planted with corn or potatoes at least two successive years, then seed down in fall with about half a bushel of Timothy—keep it in grass but two years, then plant again, use 200 bushels slacked lime to the acre; plant two years, then seed again, as before, the longer you work it in this way I think the better. We have thousands of acres of land in the county of Ulster that could be drained and made the most productive of any of our lands.

C. L. KIERSTED.

Kingleton, *January* 10, 1859.

COMFORTS AND LUXURIES OF THE FARM.

Farmers can hardly afford those extravagancies, which a man of sense would not indulge in, if he could, because they are hurtful, and in the long ran tend more to diminish than to increase the pleasures of life. But the solid comforts and the real luxuries are his, if he will command them.—An exchange says: "We hope our farmer readers will this Spring try a good many things which they have never yet done—prepare hot-beds for early vegetables; do a good deal more grafting and budding than usual; make early onslaught upon the noxious insect tribes; set out fruit trees, go in for better gardens—well drained, *trenched* and manured—use a sub-soil plow wherever possible, etc. These things need to be thought over and planned for. Depend upon it, these operations will not cost half as much as you anticipate, and they will pay at all events twenty per cent. and probably one hundred to five hundred per cent. on the investment."

FARMERS SCOLDED BY A FARMER.

We copy from the Bucks County (Pa.) *Intelligencer*—one of the best weeklies that visits our office—a rather severe article, on the misuse of corn stalk fodder; but since writing the above caption we conclude to omit the scolding part, though pretty well deserved, and to publish only such part as will be well for our readers to remember next Fall and Winter. Here it is.

The method of stacking adopted by many is objectionable, for obvious reasons; first, the fodder must remain exposed to the weather until the whole field is husked, or, if the field be extra large, till a sufficient portion for a suitable stack can be obtained; and, second, after it is stacked the weather penetrates it to a great extent, damaging most part of it, and thus rendering the whole, when cut, liable to be rejected by the cattle. The truth of the latter assertion is made very apparent to the unsophisticated when they attempt to cheat the cattle into the belief that weather-beaten, mouldy, half-rotten corn stalks, when cut up and mixed with a few of less worthless description, converts them all into a good, wholesome article, by a total rejection of the whole, and of which nothing short of actual starvation would indnce them to partake. This has been a fruitful source of disappointment to those who have expected much from the cutting of their corn stalks, yet such is the fact, that unless a complete system is exercised in the proper securing and protection of the stalks, the "old method" would be

preferable. I would therefore impress on the mind of every farmer that it is all-important to begin at the beginning, the same as in haying-time. Why, you would not think of cutting all your grass at one time, and then waiting till it was all sufficiently dry before hauling it into the barn! No, indeed, you cut and dry as you go, until the whole crop is safely housed; then do likewise with your fodder—husk and haul into the barn as you go, and, my word for it, your best hay will not excel it in nutritious qualities.

To operate my cutter I use a one-horse endless chain or railroad power; sufficient power is thus obtained to cut the stalks about three-eighths of an inch in length, and at the rate of one hundred bundles in two hours.—After the stalks have been prepared in this way, the dry cattle have a bushel basket well filled fed to each, without any meal, four times a day. Should there be any refuse, or coarse parts of the stalk, which, in consequence of their not being steamed, will be rejected by the cattle, they are carefully removed from the troughs before each feed. About the above quantity, more or less, is as much as they can conveniently consume in one day. This keeps them in a good condition until they become springers, when a somewhat different system is adopted. Then, in addition to the usual quota of cut stalks, a heaped half-bushel of cut hay, (prime clover) mixed with two quarts of corn meal and two quarts of wheat bran, properly moistened with water, is allowed at the morning and evening feed. This keeps them up to their milk finely, affording a rich return in first quality butter that would tempt the appetite of the most fastidious epicure. I have made recently twenty pounds of butter a week from three fresh cows, which I think "a farmer" will agree is no mean proportion for Winter dairying, particularly when the amount of food consumed has been so remarkable for economy.—Truly, it is evident from this, that there is a profit in practical agriculture; indeed, I know many practical farmers who would emphatically add "That's so!" E.

Near Bustleton, *March* 2, '59.

WOMEN, WHAT SORT OF FARMERS.

During the past year, Mrs. A. E. Flint raised on her plantation in Louisiana, 1,800 hhds. sugar, 1,000 bbls. molasses, and 100 bales of cotton. This is the largest crop ever produced on a single plantation in Louisiana.

It will soon come about in our country, as it has in England and Scotland, that farmers' widows, instead of abandoning the farm, upon the death of the husband and father, and leaving the family without substantial means of support, will carry it on successfully, and show themselves the best farmers we have.

PROFITS OF FARMING.

The Ohio *Farmer*, a Journal that we always regard as eminently practical, sound and reliable, on all matters of farm interest, says;—"Allowing the farmer to take out of his produce reasonable wages, as a compensation for his labor, and his per cent. of profit on the valuation of his land, implements &c. will not probably, in Ohio, exceed three per cent. per annum."

It then goes on to show, that in consideration of the certainty of a competency, farming is really a desirable avocation, as compared with commerce, with all its high per cents, its glowing profits, and withal its terrible uncertainties. We think it

makes out the case clearly, and that every man, who takes a right view of the great ends of life, and who rightly estimates what true happiness is, would rise from the perusal, saying, "give me the three per cent. and the calm security of the farm; I dislike the idea of but three merchants in a hundred getting through life with out 'bursting up' once or twice, and generally failing to pay their creditors into the bargain." He comes to the statement, true undoubtedly, that not more than seven merchants in a hundred die rich. "Zounds," says he, "I would rather be one of the ninety nine farmers in a hundred to have enough, than take the slender chance of being one of the seven merchants to die rich." He is right. Give him three per cent., if you can allow him no more, and the certainty of enough, rather than subject him to the risks of commerce.

But can he not get more? We think he can and in another article we will show our reasons for so thinking.

THE UPS AND DOWNS OF WHEAT.

Mr. C. Wren Hoshyn writes to the Times: "For no less a period than thirty-two years, ever since 1827, the price of wheat has moved in quadrennial periods—four years up and four years down—with a regularity so steady and invariable that it is difficult to cast one's eyes over the scale of annual averages and escape the impression it conveys of a perfect natural cycle. No expansion into verbal statements will do justice to the expressive tale which the diagram of annual prices affords to the eye. Briefly told, however, and omitting fractional figures, it is as follows. From 1827 to 1831, the first quadrennial period, the prices of wheat rose from 58s. in the first named year to 66s. in the last. Thence to 1835 it fell by regular annual steps, 58s., 52s. and 46s. to 39s. In the next four years it rose again with equal regularity, through 48s., 55s. and 64s. to 70s. in 1839. Then down by the gradations of 66s., 64s. and 57s. to 50s. in 1843. Up again through 50s., 51s. and 54s. to 69s. in 1847. Down again in turn, by the regular stages of 50s. 44s., 40s. to the figure fearful to agricultural eyes of 38s. in 1851. The next four years it mounted again by the encouraging degrees of 41s., 53s., 72s., to the Crimean altitude of 74s. in 1855; whence it has declined, in obedience to the same singular law of succession to 69s. and 56s. in 1856 and 1857, and to the still lower figure it holds in the year just expired, the third, and happily the penultimate of our present descending series."

LARGE FARMING OR SMALL.

Some merchants, as their business increases, employ more clerks, and do well just about in proportion to the number employed simply because they have the business capacity to control a concern that would be unwieldly to others, and often to others who are entirely their superiors, in all the most important attributes of *manhood*. With farming, it is precisely so, with a single exception, and that is, that it is vastly more difficult and requires rarer powers to manage a great farm successfully than a great store. Some of our millionaire neighbors in bank and store will not believe this, but it is as true as it is that they are rich, and that they are made so by other men's labor, and do not deserve their wealth half as well as the working farmer does his. If a farmer is conscious of a capacity to do largely in

his line, why may he not undertake it as well as the merchant?

But many merchants, as their business grows, do not increase their force employed, and actually do better with a small store and few clerks, doing little more business than they can do with their own hands, than they could by larger opperation. Not a few of these are the best of men. They know themselves, know they were not born to command, and so keep within their proper depth. It is so with farming. To manage a thousand to a ten thousand-acre farm, employing a vast amount of labor, being everywhere present, keeping the irons all hot and burning none, requires a combination of patience and energy, of activity and coolness, of kindness and commanding force, which few men possess. Otherwise, we might as well look for from three to five million-dollar farmers all over the country, as for three to four-million-dollar leather stores, down in what is called the swamp of this city. Things being as they are, a vast majority of farmers will do better on a hundred acres than on more, just as a majority of merchants will do better with a small store and one clerk than they possibly could with a large store, a fleet of ships, and a thousand clerks and other employees. But all this, is no reason why farmers educated well and of the requisite mental force may not undertake great things in farming, as others of smaller calibre do in commerce.

STARCH IN POTATOES.

According to Stockhardt, the potato contains, in 100 pounds, 10 pounds of starch, in August; 14, in September; 15, in October; 16, in November; 17, in December; 17, in January; 16, in February; 15, in March; 13, in April; and 10 in May.

If course this cannot be strictly true in all cases, for much depends upon the kind, something upon the soil, and not a little upon the manure and upon the mode of culture. But it is a well settled point that the potato increases in its substantial value as food, till sometime in September, if planted early, or in October if planted late, when it reaches its highest nutritive value; that it holds this maximum value till nearly Spring; and that it then diminishes in value through March, April, May, June and July, till it becomes entirely unfit for food.

One inference from this is, that so far as considerations of economy effect our choice of food, we should do well to use potatoes more freely from September to March, and less from April to August.

Another inference is that the poor can hardly afford to use this kind of food in May, June and July. It is, at that season, as prices have been for years past, the dearest food they can purchase.

The truth of these inferences however depends somewhat upon the manner of preserving potatoes. The depreciation in value as food is not absolutely unavoidable. A potato, left in the ground, if not frosted, is as mealy and contains as much starch in May as in December. Hence we may infer that, if taken from the ground in Autumn with a large quantity of earth, and placed in an ice house, where it would be kept at a

temperature but little above the freezing point. it would remain good for an indefinitely long time. So, if imbedded in moist earth and placed in a celler, so ventilated as to be always cool, it will keep till far into May, just about as good as when first dug. But of this and other facts concerning this important crop more in another place.

MORE ABOUT THE PROFITS.

Will farming give six per cent., on the value of the land, and twelve per cent. on a money capital of half that value to work it with?

In other words, does the farmer, whose land is worth $2,000, and who works it with a money capital of $1,000, gets $120 for interest on his land, and $120 for the use of his money, over and above a man's yearly wages, say $160 a year, making in all $400?

Some do and some do not, will be answered. It is so; some do and some do not, say we; but where the don't comes in there is miserable shiftless, thriftless farming that *don't* deserve the name. We could give a great many reasons for thinking so, and a bundle of them for thinking that the farmer who wields such a capital and manages such a farm well gets a great deal more than $400 a year. We will content ourselves with one reason; it is, that all our life we have seen men in just that position, living, and living well enough, giving their families about as many comforts and privileges as cost other men six or eight hundred. We infer that they could not have done it with less than $400, that they must have received more than that or they could not have held their own, and gained a little every year, as we have known such farmers do.

Tom Thinker, of Thinkersville, is a very thinking man. He is no sharper—would not cheat a neighbor any more than he would wish a neighbor to cheat him. He is not an unreasonably hard worker—is industrious, but takes life comfortably. He is not a shirk—pays the minister, pays the teacher, escapes the lawyer, helps build the school-house, grumbles a little, but when another good thing is to be done, helps do it.

Tom Thinker's farm never was worth much over $2,000, nor probably (we have never looked behind the curtain) has he ever had much over $1,000 invested as a working capital. Time out of mind, he has been rated at just about $3,000. All this time he has lived prudently, but never meanly. There is nothing mean in him. Now to have lived comfortably, to have educated three or four boys and dismissed them, as he has, to other business, before they had done much more at home than eat, drink, and wear out clothes; to have married off three daughters and given each a small portion, and to have the little property at home kept good at least, is worth more than $400 a year, more than $500, and must have cost him more than either; and therefore his capital has paid more than six per cent. on the land and twelve per cent. on the surplus. He certainly could not have done for himself and his large family, and the public, what he has, with less.

But Tom Thinker is only a sample of thousands of small but thrifty

farmers who *bring up* large families, live well and maintain a respectable and useful position through life, and have enough, if they do not die rich, all of which must cost more than can be accounted for, unless farming capital is worth something.

OIL CAKE.

Oil cake is considered by many farmers excellent for cows. Mr. Elijah Wood, of Concord, Mass., thinks that it is one of the best articles of food for them, even at $36 per ton, the present price: and would sell his corn at $1 per bushel, and purchase oil cake as a matter of economy. It seasons and imparts a relish to fodder, especially the coarser kinds, bog hay, &c. He cuts his fodder, throws it into a large tub or trough, moistens it, then mixes the ground oil cake with it. It is best to let a mixture of this kind stand a few hours before feeding it to stock, as the flavor of the cake becomes imparted to the whole mass, and cattle eat it voraciously. No bad taste or flavor is imparted to milk, when no more than two quarts of ground cake are fed to each cow daily. When mixed with shorts, or shorts and corn meal, in about equal proportions, oil cake is also an excellent feed. It is also considered conducive to the health of cattle, in producing a loose skin, and a smooth coat of hair. The manure from cattle fed on oil cake is much better than from stock in ordinary cases.

That oil cake is an excellent food for cows and still better for fattening oxen, is certain. Whether it is as well worth $35 a ton as corn is $1 a bushel, we do not know, but it probably is.

DEEP TILLAGE.

A deep and thorough tillage is conducive to fruifulness in crops; yet it is never safe to turn up too large a portion of the sub-soil at once. The work of deepening the vegetable stratum of soils should be consummated gradually; a little of the substratum only being brought up at a time —say from half to a third of an inch at each successive plowing, and so on till the soil has been stirred and improved to the depth required. Manure should be applied liberally, and lime sowed every time a fresh layer is brought to the surface. The fall is, perhaps, the most favorable season for this operation, as the soil will then experience the greatest benefit from the neutralizing effect of the calcareous matter applied, and from the pulverulent and disintegrating influence of the Winter's frost. The quantity of lime required in this process of amelioration will be best determined by a chemical examination of the sub-soil in connection with that of the surface earth. If of a calcareous nature, very little lime will be required, and perhaps none; but if this principal (lime) be present only in small quantities, it should be supplied, and caustic lime is the best article that can be used, though wood ashes in liberal quantities, produce very salutary effects.

The above, which we cut from *Goward's Real Estate Register*, gives our views almost precisely on the above subject. The ½ to ⅓ of an inch seem to us rather homeopathic. We would rather say an inch or two, perhaps two inches, though a third or a half an inch increase in the depth of cultivated soil in an acre amounts to more than most persons would suspect. A foot in depth gives 2000

tons, varying of course with the character of the soil, but about that. An inch then gives 166⅔ tons; half an inch 83⅓ tons; and a third of an inch, 55 5-9 tons. By deepening the furrow 1½ inches, you add to the cultivated soil, just about 200 tons to the acre.

How much it is well to deepen a soil depends much upon its character, but more upon how you mean to treat it. If it is to receive but little manure, to be stirred but seldom, barely run over in the cheapest way, six inches is probably as deep as it would be advisable to plow. But a field naturally good, may certainly be deepened gradually to twice that depth, and probably more, with increased profit, if the cultivation be otherwise liberal and thorough.

THE POTATO, (SOLAMUM TUBEROSUM.)

The extent and value of this crop will justify us, at this season, in speaking somewhat at length of its *propagation, varying value as food, cultivation, soil, manure, preservation for late use, &c.*

The potato is propagated from the seed, and in no other way. It is true the existence of a potato plant may be prolonged indefinitely by the tuber; still the progeny of one seed is but one plant. As certain mosses, which produce peat, are constantly dying at the bottom but growing at the top, and thus continuing on one plant; or, as some tuberous roots running under the ground, but parallel with its surface, prolong their existence by growing at one extremity, while they are dying at the other; so is it with the potato; most of this year's growth perishes in Autumn, but the tuber, which is a part of the plant, (of the stem, not of the root,) lives and grows on next year, and so each year the tuber forms the connecting link between the part of the plant that is dead and that which is yet to live; so that when you put a tuber into the ground you get no new plant but only continue the growth of an old one, which may be done thirty, fifty, possibly a hundred years, and perhaps ever more.

But if you plant a seed from the bulb you get a new plant; and this, like the parent plant, is capable of a protracted existence by means of the tuber. The young plant is small, and it produces but few and small tubers. The second year it grows larger and produces more and larger tubers. By the third year, the quality, oftener unlike than like that of the parent, begins to show itself. If out of a thousand, nine hundred should prove worthless, ninety of no marked excellence, nine very doubtful, and one positively good, it would be doing pretty well.

Some kinds are less watery than others, and therefore contain more solid matter. The same kind varies in the amount of solid matter, on different soils and with different manures. It is evident, therefore, that there is a wide difference, not much, if any, less than fifty per cent., in the nutritive value of potatoes. Neither those who buy, nor those who grow potatoes for their own use, should consider the number of bushels as a very exact test of the real value. It is about as exact as the traffic in eggs by the dozen, when some dozens are about twice as heavy as others.

For the cultivation of potatoes, we believe sweet upland, neither wet nor dry, but of medium moisture, are best, though we have known large crops, of excellent quality, to be grown on half reclaimed muck swamps, by the aid of ashes in the hill, and we have evidence that the growing of potatoes is a good use for such land, while in process of reclamation, provided ashes, or what is probably better, ashes and lime, be applied in the hill.

We would prefer turf land for the potato crop. So far as this crop is considered, we believe five or six inch plowing is as good as ten or twelve; but for the ease of cultivating—subduing the grass and keeping the field clean, we would plow deeper; and certainly much deeper for the sake of the after crops.

The rows should be three feet apart, and the hills in the row, two feet.—There will, with these distances, be great interferences and entanglements of the tops, if strong nitrogenous manure be used, as that from the sheep-pen, or from the stalls of fattening cattle; but not if carbonacious, or mineral manures be applied. In either of these cases, the tops will be apt to grow stocky, not long and entangling, and the distances just named are quite sufficient.

Let a plenty of half decomposed leaves, or strawy manure from the yard—chip manure if you have it—old and well cured muck—any or all these, as you have them—be plowed in and supply the carbonaceous matter for the crop. For the mineral matter a handful of ashes applied in the hill will answer. A mixture, for an acre, of five bushels of ashes, four of oyster-shell lime, two of plaster, and one of salt, would be better; but the ashes are the most important ingredient, as they contain more or less of all the others, and if used alone in a larger quantity will do well.

In case the mixture above named be used, care must be taken not to place it in a compact mass under the hill, but to spread it over a surface of a foot or two in diameter, as otherwise it will be too heating to the seed, and may prevent its growing, should there be little or no rain after planting.

The benefit of mineral manure, over strong stall manures is two fold;—first, it is much less apt to produce the potato disease; and in the second place, it produces potatoes of a better quality—less watery, more solid matter, and the solid matter richer in the elements of food. It has been proved that if you plant two parts of the same field with the same seed, putting strong stable manure in the hills of one part, and a handful of the composition mentioned above in those of the other, the solid matter in the crop of the first part will be to that of the second only as twelve to fifteen—a difference of twenty-five per cent.; and, what is more, solid matter of the potatoes grown by the mineral manure will appear, on careful analysis, far richer in the important elements of food.

It is often recommended to cut the seed; and many are the farmers, who are so confident of the benefit, that they would hardly suffer a whole potato to be planted in their ground. Many of these are, to our certain knowledge, good farmers, whose opinions in almost any subject we would

respect. But we must think them wrong in this. After a great many trials, we prefer one smallish, or medium sized potato, uncut, in a hill. If we were to cut it at all, it would be to cut off and throw away a slice from the seed end, to diminish the number of shoots.

The depth of covering might vary with the compactness of the soil, but should be sufficient to prevent the necessity of hilling up, say four inches in a compact soil, five in a medium soil, and six in a light one, inclining to dryness; and the furrow should be in depth equal to the thickness of the covering, so as to leave the covering on a level with the general surface.

Cultivate and weed as soon as the plants appear, but draw no earth to the hills. When the tops are nearly as tall as they can be without falling, cultivate again, hilling but very slightly, and making the hills broad rather than high; and do the work so well that no more weeding will need to be done. Potatoes should not be hilled more than once, as every new hilling causes them to set new tubers, more in the whole than the plant can bring to a good size, the effect of which is to make the crop unequal in size and small. Neither the tops nor the fibrous roots should be disturbed, after the plant is large. The same is true of corn. Level culture and an entire destruction of the weeds till a little into July and then "let alone" is the rule for the corn-field.

As to the best time for planting potatoes; if you want them for the market you will plant early of course, and look out for the early prices. But how for field crops far from a market? Since the potato disease commenced its ravages, there have been years when the late planted came off best. But ten times as often have the early planted escaped. We would say, therefore, plant as early as the ground is in a good condition, and you think the crop will be safe from frosts, before April goes out in this latitude.

To preserve potatoes for use, with a view to their holding their autumnal qualities as long as possible, do not expose them to the sun when dug; put them in a cool place as soon after being taken from the ground as may be; and if some moist earth adheres to them all the better. The nearer they are to the same condition as in the ground the better will they keep. The tendency of the potato is to turn its starch into a kind of gum called by chemists *dextrine*, and then to change this gum into sugar. It is a singular fact that starch, gum, and sugar are composed of the same elements and in the same proportion. A slight change in the arrangement of the elements turns starch into dextrine and then into sugar. In proportion as these changes take place in the potato, it loses a part of its value, and becomes less agreeable to the taste, in consequence of the starch, on which its mealiness depended, having disappeared.

Every exposure to a hot sun, the least freezing, and the swelling of the eyes in germination, all hasten those internal changes, by which the value of the potato as food is diminished. It should therefore be kept at a temperature above the freezing point, but the less above the better.

What we have said of the change

of starch into dextrine and then into sugar, accounts for the facts, which every one must have observed, that a potato, which has been touched with frost, has a sweet taste, and that sprouted potatoes are sweet. But it is, in neither case a pleasant sweet, which any one would prefer to the original starchy and mealy condition of the potato, when first dug; nor does it afford, in its changed condition, as much or as wholesome nourishment.

In speaking of coarse carbonacious manures, we omitted to state, as we intended, that on turf land, the turf itself, being filled with grass roots, supplies in a great measure that requisite. Of course every practical farmer will understand that such manures as straw, leaves, leaf-mold, muck and the like, are less needed on a thick turf, and that they are important about in proportion as the land has been long plowed and has been deprived of its organic matter.

LOCUSTS IN 1859.

Dr. G. B. Smith, of this city, whose speciality is locusts, says that these insects will appear the approaching Spring in seven different districts of the country, viz:

1st. In the whole Valley of Virginia, from near the top of the Blue Ridge Mountain on the East, the Potomac river on the North, to the Tennessee and North Carolina lines on the South, and several counties on the West. They will probably occupy a considerable portion of both North Carolina and Tennessee, overlapping other districts.

2d. In North Carolina, from Raleigh to Petersburgh, Va., and adjacent counties in both States.

3d. In St. Mary's county, Md., the Southern part of the county, occupying about one half the county.

4th. In North Carolina, Rowan, Davis, Cabarras, Iredell, and adjacent counties.

N. B.—The above are all of the Northern tribe, or seventeen years' locusts, and will commence emerging from about the 5th to the 15th of May.

5th. In Georgia, Gwinnet, DeKalb, Newton, and adjacent counties.

6th. In Tennessee, in the Northern and middle part.

7th. In Mississippi, in all the Eastern portion of the State, from the ridge on "backbone" that runs North and South about forty-five miles from the Mississippi river to the Eastern boundary of the State, and probably extending into the States on the East.

The three last districts being to the Southern tribe, or thirteen years' locusts. They will begin to emerge about the 20th of April in the extreme Southern district in Mississippi, to the 5th of May in Georgia.—*Baltimore American.*

IMPORTATION OF TEA SEED.

We understand that despatches were yesterday received by the Commissioner of Patents from Mr. Robert Fortune, dated at Shanghai, 6th of December, enclosing bills of lading for large quantities of tea seeds packed in earth; Yang-mae tree and its seeds; seeds of the Camphor tree, Tung oil tree, and of the "Oo-dang."

The Yang-mae is much esteemed in China for its fruit; the Tung-oil produces a valuable oil, largely used by carpenters and varnishers; and the Oo-dang is highly prized for ornament. The introduction of the camphor tree into Florida and other Southern States has been contemplated for more than a hundred years, but no direct measures have been taken before the present that would seem to warrant success.

We understand that the Patent Office has erected upon the most ap-

proved principles, a house on one of the public reservations in this city for the germination of the above-named seeds, where they will be placed as soon as they arrive, preparatory to transplanting them to the localities in which the experiment of their acclimatization and culture are finally to be made.

All this is carrying out the intention of the Government in instituting the agricultural division of the Patent Office, and will no doubt prove one of the many good points of that valuable bureau.—*National Intelligencer.*

FEEDING CARROTS TO HORSES.

The carrots should be sliced by an ordinary root cutter, and fed at the time the animal gets his regular feed. If the horse has been fed with four quarts of oats at a time, give him two quarts of oats and two quarts of sliced carrots; by such a practice the nitrogenous part of the oats has no chance to pass off in a fluid state, but combines with the pectin of the carrot and forms a gelatinous substance that is retained to supply the wants of the body, and give muscular strength to the animal. Carrots alone are not as good as oats for a working horse, but carrots and oats fed according to the above directions are better than oats.

Some experience, more observation, and the reasonableness of the whole thing, convince us that the above, from the *Working Farmer*, is true.

A QUESTION ANSWERED.

A correspondent, referring to the recipe in our Jan. No. for the preservation of cider by means of plaster, (sulphate of lime,) inquires how much sulphate of lime to the barrel? It is not important that you should be exact in the quantity, since sulphate of lime is a harmless substance, inert till acted upon by the acid, and consequently will have no injurious effect if applied in excess. The only rule necessary is, to add enough, say a large double handful to a barrel. If more be added it will only settle to the bottom with the lees, and may be separated with them from the cider. While the cider is yet brisk and sparkling, sweet and yet a little acid, put in the sulphate of lime, and you arrest the fermentation, and retain the fine autumnal flavor through the year. So says Prof. Horsford, and there is abundant testimony from those who have tried it, that it is. It may be well to try it in the Fall of 1859, as there probably will not be the same call for "hard cider" in the Summer and Autumn of 1860, as there was in 1840.

JOHN FASTER'S FARMING.

We said in a back number that John Faster's farm was purchased, together with a small stock and a few implements, at a little above $4,000, that on his taking possession he was in debt after stocking it fully, and procuring good teams and implements, nearly $4,000, and that wise men prophesied that he would never pay for the farm.

Well, ten years are gone and he has not payed for it yet; but he has paid nearly twice as much in making it a farm that will give him a living and pay for itself. It is admitted that this farm had on it more undeveloped resources than the generality of farms, and fortunately for him its resources were of a kind to be easily developed.

There was a forest, for instance, of old timber, which had now become valuable, and there was a large extent of swamp land, of a kind that could more readily than is usual be converted into an extensive meadow, making it one of the best hay farms in the world, while the clearing of the forest gave a large income for timber and furnished most excellent pasturage.

John Faster availed himself of timber and fuel from the old forest. These he sold for a large amount yearly. With the money he hired labor, supported his family, and improved his buildings [illegible] his farm. But he took good care not to denude the farm of the old timber, [illegible] he had provided for the growth of new. A large territory on the rear of that farm was already covered with bushes, when he purchased. It was of little good for other purposes than growing wood and timber. From this he shut off the stock, that it might be growing timber and fuel, to take the place of the old timber; and to-day the prospect of plenty of timber for the future is just about as good as if the old forest had stood untouched.

We are not going into an endless detail of John Faster's farming. Suffice it to say, that now at the end of ten years, he has thirty acres of meadow land, good for two crops of hay, which under a man who does not believe in hiring labor would have remained a useless swamp, redolent with frog music in the Spring, and none of the healthiest exhalations in Autumn. On more than fifty acres, he has cleared off the stones and deepened the soil from four or five to more than ten inches. The score of ill-shaped, miserable fields each surrounded with a falling down fence and a filthy hedge row, he has reduced to eight, ten, and fifteen acre lots, and without expending much for manure, except the labor of making it, he has found the means of enriching them on his own farm; and they now produce such crops, as 75 bushels of corn, 200 bushels of potatoes, 2 tons of clover and herds grass; and oats, barley and turnips &c. in proportion.

On one part of his farm is a cranberry plot, giving him a clear $100 a year, made from ground which some men would wished could be sunk without making a worse hole. Nobody now says, that his is a poor farm, nor does any one dream, that it will not pay for itself, as it is now worked. True it costs two or three times as much to carry it on, as it did under the old regime, but it produces five times as much beyond the support of a family, as it did under his predecessor.

The former owner carried it on cheaply; made it poorer every year; and grew poorer himself, till he was obliged to sell out. John Faster has made the farm better each year, and is himself in a way very soon to own the same farm—better in buildings, better fenced, and three times as productive—clear of all debt.

No farmer can afford to run a farm down. John Faster's predecessor did not run that farm down; but he did what is about as bad—failed to bring it up; and he failed and sold out—rather *was sold* out in about twenty years of that sort of experience.

To improve a farm, to make it a

little better each year, till it shall have reached a high state of productiveness, is quite possible, and it is moderately profitable, not promising vast wealth in a single year, but surer than any other employment to give a happy competency.

We appeal to observant farmers that it is so; and we say to all farmers: be making your farms better, however good they were before. It is the most profitable way. Seek not alone to make money *from* your farm, but to create value in your farm, by improving it.

We admit that one may be too fast in farming, as in any thing else, and we propose to show in our next how one Bill Too-Fast run a very brilliant race and "bust up" the second year.

A NEW FENCE.

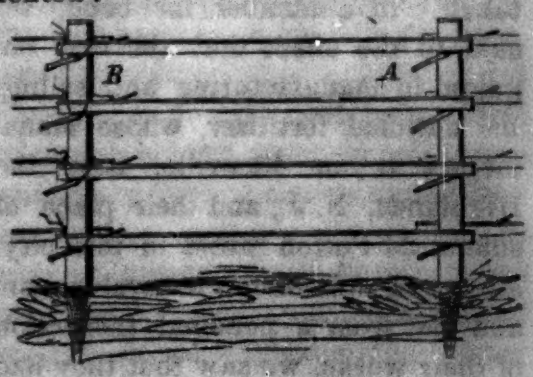
ED. FARMERS' MAGAZINE: I see sometimes in the *Country Gentleman* and *Cultivator* descriptions of, and how to make, fence, new plans, &c. I built about half a mile of new fence last year. I give you my plan. It may be new. I never saw one like it. I will give you a plan of it as near as I can. The fence is straight, from three to five rails.

EXPLANATION.—I point my posts on account of having a clay subsoil, in which the posts are apt to heave. In this way, the fence can be straightened, and the posts driven down to their place in the Spring in a short time; and they are not liable to break, as in other plans, or in the common board fence. I bore holes in the posts at proper distances, according to the number of rails I want, 1½ inch diameter, and drive in white oak pins. These project five or six inches on each side. I lay the rails on those pins, one on each side, and bind them down with wire. Small sized fence wire will do, if annealed. Posts set twelve feet apart, require the rails to be thirteen feet long. The fence I built was eleven feet rails, posts ten feet apart. I cross the wire in such a manner as to bind both rails to the pins. You want mittens to twist the wire with at the fastenings. A small file to mark it with makes the breaking easier. I made a few pannels without the pins, by crossing the wires through the holes in the posts —letting the rails lie in the wire, and twisting the ends of the wire together to the tops of the posts, which I find makes a very good fence, the rails not getting loose, as when nailed to the posts, by the heaving of the ground.

Yours truly, J. V.

The following cut—which we have had engraved for the purpose—shows a length of this fence. The wire binding the rails to the post and to the pins, it will be seen, is represented in but a part of the lengths.

This fence, we believe, is not patented!



☞ Cotton is now grown in Cuba with excellent success.

NATURAL AND ARTIFICIAL FERTILIZERS.

REFORM SCHOOL,
West Meriden, March 12.

J. A. NASH, A. M.; *Sir:*—I wish to make a few simple inquiries in relation to the "National Fertilizer," which I notice is highly recommended by yourself in the last number of your Magazine, as being of great utility in the production of crops. Allow me to inquire what it will probably cost at this place, if sent in small quantities: say one hundred bushels; and what is the most approved method of application for the usual crops.

I was employed on the State Farm in Mass., while you was a member of the Board of Agriculture, and visited the farm as such, and knowing your opinion of the ordinary practice of applying fertilizers or concentrated manures to correspond very nearly with my own, I confide the more in your favorable opinion of this. Will you give me the favor of a line in reply to the above queries, and greatly oblige,

Yours truly, L. P. C.

The writer of the above is mistaken. In a number far back, we said to the effect that the men engaged in manufacturing and selling the national fertilizer, whose manufactory is in Riceville, near the Highlands, N. J., and their place of sale at 36 Fulton Street in this city, are in our opinion fair honorable men, and that from a personal inspection of their works, we saw that they had the material to make an artificial manure worth the price asked for it, and would probably do so.

Farther than that we did not go; and it will be long before we shall say more in favor of any artificially manufactured fertilizer; for our readers know well that we are cautious in that matter. Probably many of them and more of the manure venders think we are cautious over much. But we have our reasons. Improvements in agriculture that shall benefit the farmer as well as the merchant are to our liking, and we have long been of opinion, that the profits arising from portable manures have not been yet rightly divided between the two classes.

This has led us to press upon the farmer the importance of making the best possible use of the home fertilizers, from the stable, the yard, the sheep pen, and the sty, the muck swamp or the marl pit, the neighboring factory, and from every source where he can get them at cheap rates and of known value without heavy bills for transportation; and then, and not till then, to buy manures, since it is folly to run over lean fields, but to buy with great caution, working by the "tried rule," and having better evidence of the goodness of a fertilizer, before buying it, than our or any other person's testimony. That has been our view of the subject, and we still hold to it.

The fertilizer to which our correspondent alludes, as commended in our last, must have been the "Greensand Marl," unmanipulated, just as dug from the pit. That this is a valuable fertilizer is made certain by the testimony of the shrewest farmers and gardeners, men who have no interest in its sale, but a deep interest in the crops they are getting from

it. It is sold by various parties, we believe, and among others by Messrs. "Sears, Townsend & Atwood, 82 Nassau Street." We know not the price by other dealers. Their price is seven cents a bushel, delivered on ship-board, at the New Jersey Highlands. Seven cents the bushel brings it at about $1.50 a ton; and whenever it can be got into the soil at an expense not exceeding sixteen cents a bushel, just about $3.20 a ton, it will be certain to pay, with a large profit.

Its power is great, not only to increase the first crop, but to amend all light soils, giving them compactness and solidity. Thousands of acres in Monmouth County, so meagre a few years ago, that the more a man owned of them the poorer he was accounted, are now worth $100 an acre, and among the most profitable lands to cultivate in our whole country. Very large tracts in Burlington, Atlantic and Ocean counties, now in market for a song, merely because the farmers there are too slow a team to have heard yet what their neighbors in Monmouth county have done, will undergo a like transformation as soon as the railroad through these counties is completed, and men go there, who have life enough to hear of a great discovery in the same century in which it is made. The new road will distribute the marl, and those counties, within an hour or two of both New York and Philadelphia, will be one great garden for both.

We will say to our correspondent, and to others who may feel interested to know, that we think well of the National Fertilizer. The price, we believe is $35 a ton, and from what we know of the men and the materials at their control, (marl, bone phosphate, sulphuric acid to change the last into a super-phosphate, and plenty of fish to supply ammonia,) we should expect their fertilizer to be worth the money. But we *know* well of the unmanipulated marl. There can be no mistake about it. Five years ago a most successful farmer in New Jersey, who was lugging the Squankum marl over a bad road a distance that must have cost him nearly twice as much as its purchase at seven cents a bushel, and could not have brought the cost at much less than twenty cents, on his land, in answer to a question from us said: "A man would be a fool not to use it freely here;" and added: "I get three hundred bushels of potatoes an acre with it, on the land that would not give two hundred without." Hundreds of just such testimonies, in connection with Prof. Roger's analysis, showing its valuable ingredients, settle the question of its superior excellence.

For our views on the application of manures, we refer our correspondent to various articles in this and previous numbers. Compost with it, in the Winter, all the materials you get for that purpose in the fall previous, and we believe labor employed to get them together pays better than most of the highly concentrated and consequently expensive manures; and having made a large pile, get it into the ground in good season, keeping none over but for special purposes, and do not be afraid of expending labor enough to pulverize, divide finely, and mix pretty evenly with the soil. Make the field a mellow compost

heap, and you will not fail of a good crop.

We learn that Paoli Lathrop, Esq., of South Hadley, Mass., sold the tobacco from three acres last Fall for upwards of $1100—but we reckon he did not get that crop without applying manure freely, and what is almost as important, working it in well. On sandy land, we suppose manure may be plowed in advantageously, provided it be afterwards stirred up and mixed with the whole soil. On heavy land, especially if inclined to be cold, our opinion would be in favor of harrowing in and mixing with the soil to a less depth. Top dressing of grass lands we do not believe should be discarded. But the putting of strong manures on the surface, in a coarse, lumpy condition, and leaving them to perfume the air for miles, seems to us more like the manuring of the heavens than of the earth. The manure ascends in such a case; although it will come down, nobody knows where; it should be composted in order to hold whatever parts of it pass, on exposure to sun and air, into a gaseous state; and it should be worked down finely to the surface.

WHEN TO SEED FOR PASTURAGE.

A subscriber, whose inquiry deserved an earlier attention, asks:—

"When is the time to sow grass or clover on wheat land? My land was turned over in August. In September I harrowed, sowed and brushed in. Now I want to give my land rest two or three years and also pasture at the same time. Please tell me the time, and what will be the best to sow. My land is high ridge land; inclined to be wet or spongy in Winter; has no rocks and little or no sand. It will produce six or eight barrels of corn to the acre; has a clay foundation. If you will give me some hints I will be much obliged to you.

J. W. P.

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Our first suggestion is, that land, having "no stones," "not sandy," "on a clay foundation," is the very land to subject to a perfect system of underdrainage and manuring with a view to make it produce—instead of six or eight barrels—sixty or eighty bushels of corn. If we get the right idea of the capabilities of the land, they are great; and if so, a hundred bushels of corn could be grown on an acre and a quarter, with a better profit, than on five acres; or, if you please, a thousand bushels on twelve acres and a half, than on fifty acres.

We presume our correspondent is a thorough going farmer; that he mentions the six or eight barrels only to give an idea of the present condition of the land, and yet we cannot avoid thinking—from other parts of his description—that it really ought to produce three or four times as much.

But all this is not to the question, What time and what seed to sow?

Early in the Spring, probably in February in that latitude; in March, if it were farther North; and in April still farther North, would strike us as the best time to seed such land as that, harrowing in the seed very lightly, or if that should seem too harsh for the wheat plants, rolling it in with a light roller, which we believe is beneficial to the wheat rather than otherwise.

Six lbs. of clover seed, seven or

eight quarts of Timothy and half a bushel of red top to the acre, we should regard as a good seeding—the clover to afford the main feed at first, the Timothy to succeed, and the red-top and other grasses which would naturally come in, to thicken the turf and afford a still more permanent pasturage.

LAND ENOUGH?

How many acres does it take to make a farm? From ten to ten thousand—just as you like, and have the means to hold. If you are a man of business tact and energy, and know how to direct the labor of others, to make them work well and yet keep their good will, the more the land the more you will make. But there are few such men; and if you have only patience to labor, without business tact and energy, always wide awake, and yet always cool, capable of commanding as well as doing, you may save as much from ten acres as from ten thousand.

SPLENDID CROPS;

Or, Does the South beat the North?

The *South Countryman*, in laudation of Southern soil and climate, in its March number says:—

"That climate must be eminently favorable to Agriculture, which enabled Dr. Parker, of Columbia, S. C., to accomplish his Agricultural feat upon "a sand hill flat," viz:—to raise two hundred bushels and twelve quarts of corn from one acre of land; and on an adjoining acre to raise eighty-nine bushels of oats, and afterwards from the same acre, and during the same year to raise eighty-two bushels of corn."

MUCK.

The value of muck in agriculture, is now universally recognized, and very few farmers who can obtain it at reasonable cost, are so neglectful of their interests as to be without a supply. On most farms, there is more or less low ground, where accumulations of muck, or of rich vegetable mould, in a state of perfect or partial decomposition, exist, and which, when hauled out and composted, or prepared by mixing with it a quantity of lime or ashes, acts as a most powerful and salutary stimulant to every description of crop. As a general thing, muck, in its pristine condition, is too strongly impregnated with acids to admit of its being applied directly to vegetation; but the action of frost, or of alkalies, neutralizes these, and renders it, in a very short time, a most invigorating article to be used in the cultivation of almost every variety of plant.

By filling our cow, hay and sheep-yards with good muck, we may make almost any quantity of dressing, and at an outlay merely nominal. Farmers pursue different methods in the preparation of materials for dressing; yet the difference is in most cases so slight, that the final result is rarely in any great degree, affected by the discrepancies. The great desideratum, as I conceive, in preparing the article, is to deprive it of its acid principle. When this is accomplished, the application of the mass will be safe and salutary under any circumstances. By placing it in a condition to receive and absorb the rich liquid voiding of domestic animals, it will of course be increased greatly in actual value; and in this way it should be always used, when practicable.

Every word of the above, which we cut from the *Germantown Telegraph*, we regard as at once true and important. If there is a word which we would alter, it would be to ascribe more of the curative influences of na-

ture on muck—to sun, rain and air and less to frost. Frost is great in its power on clay to render it friable and to prepare it to mix evenly with and to amend a lighter soil. If you apply clay to sandy soi's, the more it freezes and thaws first, the better. But sun, rain and free access of air are the things for muck. To cure it of its acid faults, it should be out six months at least, and if longer so much the better, and should be laid in shallow piles, not more than a foot deep, better in one long pile, so that it can be turned with the plow, and thus exposed to the influences of the weather. If it be thus exposed through the Autumn, and be then used about the barn as recommended above, the farmer may increase the manure heap almost at pleasure without in the least reducing its value per ton. A load of stall manure and a load of muck well cured and having one bushel of ashes mixed with it is worth more for grass or Indian corn than two loads of stall manure, and are worth at least as much for any other crop. In proportion as farmers understand their interest, they will manufacture more manure at home and buy less from great distances.

THIN SEEDING AND HOEING WHEAT.

I have just been counting my hand-hoed wheat, and the results so astonish me, that I hardly dare credit my own account. The roots average a trifle over thirty stalks each, and the least number of grains to the head is seventy-two. At this rate, allowing four seeds to the hill, and the hills two feet apart, we get from an acre of cultivated wheat, over one hundred bushels, and this from less than six pounds of seed to the acre. Ordinary wheat weighs 898,560 grains to the bushel, and at the above rate, giving one root to each square foot of surface, we get from the acre 104-089,600 grains of wheat, which amounts to a trifle less than one hundred and sixteen bushels. These figures look large, but I believe are correct. At any rate, the *facts* of the growth are correct.—*Charles Brackett, in Genesee Farmer.*

SANFOIN OR ESPARCETTE.

Sanfoin is a magnificent present of nature to those countries which fail in forage, from the poverty of their fields; no plant is, at present known, which can take its place; thus this plant well deserves, from the moderns, the homage rendered by the ancients to lucerne: almost all who have spoken of it, have placed it above all other plants employed in forming artificial meadows. Originally from the highest mountains, where it grew upon naked sterile rocks, and exposed to all the inclemencies of the seasons, it did not begin to be cultivated in artificial meadows until the sixteenth century; the strength of its primitive constitution, which it haspreserved in descending to the plain, gives it great advantages over plants designed for the same use; if it yields to lucerne in the quantity of forage it produces, it is much superior in quality; it does not like the former, produce griping in the bowels, swelling, thickness of the blood and humours; it may be given without inconvenience immediately after being cut, and this is a great advantage in years of drought, when all kinds of old forage have generally been consumed at the time of harvest; it does not require the same care in feeding as lucence and clover: if the abuse of it sometimes causes accidents, they are not generally so serious as those produced by the excess of the former plants.

The first, the greatest of the advantages sanfoin has over lucrence, is

that it grows well in all soils favorable to the latter, while on the contrary, lucerne perishes in most places where Sanfoin succeeds best, such soils as are gravelly, rocky, marly, chalky, and particularly in such as are reddened by excess of iron. The hard woody root of the sanfoin crosses the earth and seeks its food at more than six feet below the surface; the laterial roots which comes from the trunk, spread near the surface, adding not a little to its growth; it is this property which the Sanfoin has of seeking the moisture that it needs at a great depth, which makes it succeed in burning soils, and resist a degree of dryness which would destroy all other plants.

Although Sanfoin succeeds in a greater number of soils than lucerne, there are some, however, from which it is absolutely excluded; such as are wet, clayey, marshy, which freeze its roots. It has been remarked that it does not grow or does not thrive in land where dock, wild sorrel, heath, broom and lichens grow.

It is not indifferent to exposure; none suits it better than that of hills inclined about forty-five degrees, and warmed by the mid-day sun: continued heat not only does not affect its verdure, but is absolutely necessary to vegetation and quality; for this reason it is best upon elevated, mountainous and open places; this renders the plant profitable in mountainous countries, which have no natural meadows, and where the soil is poor, dry and gravelly. It is true that Sanfoin does not yield as much in poor as in good soils, but in the former it may form an artificial meadow for four or five years. Far from impoverishing the earth, this plant enriches the field where it is cultivated, and by covering it with the plow, while it is in full vegetation, it yields abundance of salts, so that it may he sown with success on the poorest fields. All the care of the cultivator should then be to increase this culture, which has put a high price on land that before was useless from its poverty: everywhere that this kind of meadow has been formed, great benefit has been reaped by it; it is only necessary that the ground does not hold water.

When Sanfoin is in a suitable soil, it produces in abundance; it makes very good winter forage; it dries quickly, its juices being less viscous than those of lucerne: this facility which it has of being easily cured, gives it a great advantage over clover and lucerne.

From the success of this plant in poor soils, it is not necessary to plant it in the good, which may be reserved for clover and lucerne, as they require them. To sow Sanfoin, the earth should be prepared by deep, cross ploughing in fall and winter, the earth being well prepared in the spring, the grain is sowed if no more frost is feared; sow double as you sow wheat, then pass the harrow and roller over it.

The seed should be but a year old, and taken from good healthy plants of two years' growth; the better the seed is matured and ripened, the better the Sanfoin will succeed.

Sanfoin has, like all other forage plants, a time to be cut, and this is the season of flowering, less watery, more abundant, more nourishing than when cut younger. Sanfoin in flower is more tender and palatable than after the flowers are gone, or the seed formed. If the grain is preferred to the forage, it is not necessary to wait until the Sanfoin is withered, for the grain will have little nourishment; the second or third year, the first shoots may be allowed to mature before cutting, the grain is beaten out in the field, in large cloths, with sticks or flails; after this operation the stalks are still good for cattle.

The duration of Sanfoin varies from four to six and twelve or fifteen years, according to the soil; in ordinary soil it lasts from ten to twelve years; it needs no manure. All kinds of cattle eat it greedily, it is very nourishing,

fattens and strengthens them: horses fed on it, have no need of oats, it gives cows a great flow of milk of a good quality, which yields rich butter of good taste.—*Cours d'Agriculture.*

CULTURE OF ASPARAGUS.

BY ANDREW S. FULLER.

Asparagus is one of those indispensable vegetables found in every well regulated garden, where anything like *vegetable* gardening is attempted. But in how few gardens do we see it grown to anything like perfection. Instead of being a quarter of an inch in diameter, and stringy as hemp, it should be at least three quarters of an inch and brittle as glass.

Asparagus is a native of the sea shore, and often found growing in the loose sand where it is immersed in the salt water at every high tide, and left in the moist sand as the tide recedes, in which position the roots are kept constantly moist but never covered with stagnant water. It is also found upon the high banks that slope down to the shore far above the reach of tides, yet sufficiently near to be benefitted by the vapor that is constantly rising from the salt water; but in neither case is it ever found growing very large—it is only by cultivation, and with proper stimulating manures, that it becomes a succulent and healthy vegetable.

The soil for an asparagus bed should be at least two feet deep, with a liberal supply of old decomposed manure mixed in to the entire depth. If the soil is a heavy clay, a sufficient quantity of sand, peat-muck, or some other similar material should be added, to make it porous enough to allow the coarse rope-like roots to spread without meeting any impediment.

A good way to make a bed, say five feet wide and forty long, (which will be sufficient for a small family,) is to take out the soil to the depth of two feet, place it all on one side of the bed except a few inches of the bottom, which may be carted away, as all the soil, with the addition of manure, will, when put back, raise the bed too much above the surrounding soil.

When the place for the bed is excavated, draw your manure and place it along on the side opposite the soil you have taken out. You should have about one third as much manure as you have of soil. Throw in manure enough to cover the entire bottom of the pit one inch deep; then put on two inches of soil, and repeat the operation until you have a foot in depth; then dig this all over with a spading fork. Then put in manure and soil again in the same manner, until you have used nearly all the material—reserving enough to cover the plants to the depth of three or four inches. Place the plants on the bed eighteen inches apart, each way; then mix the soil and manure together which is to cover them, and scatter it over the plants as evenly as possible.

Some may think this manner of preparing a bed for asparagus is too expensive, but when we consider the two points of excellence which we are trying to obtain, (*size* and *succulence*) we doubt whether a cheaper method will produce the desired results, unless it is on some very rich and deep bottom land. A bed prepared in the manner that we have described, with

good after culture, will give a beautiful supply of a really superior article for many years.

Plants should never be over two years old when planted, and we consider one year old still better. They will as a general thing produce as soon as older plants, and if they do not produce as soon, they are not so liable to be injured by being removed, and make healthier plants and last much longer.

After the plants have made shoots one foot or more in height, a dressing of salt may be given the bed, just enough to whiten the ground, putting it on at the time of rain; this will destroy the weeds besides being very beneficial to the roots. If the weeds make their appearance again during the summer, put on more salt—two applications during the season will be sufficient. Some recommend putting on the salt at the time of planting, but we have in many instances seen the plants killed by doing so.—The salt enters the pores of the broken roots before it can be properly assimilated with the sap and therefore it becomes an actual damage instead of benefit. Others condemn the use of salt altogether, asserting that it makes the stalks tougher than they would be without it. But we very much doubt the truth of their theory, as we have never found it to hold good in practice.

The beds should be covered every Fall with a light dressing of manure, and mixed in with the soil the Spring following. Then give it another dressing of salt, which will destroy whatever weed seeds may be in it.

A good soaking of liquid manure may be given them several times during the summer, for asparagus is one of those plants called gross feeders, and as the greater the growth the better it is, we can give it almost any amount of manure, if applied at the right time, without injuring it.

The plants should become well established before any stalks are cut. None should be cut the first season, and but little the second; every cutting weakens the plants, and the older and stronger the plants are before anything is taken from them, the better they will be prepared to withstand the loss.

Moderation should always be observed in cutting: never cut all the stalk upon each individual plant at one time; leave one or two to elaborate the sap, for asparagus is not an exception to the rule, no leaves no roots.

A little observation and judgment will enable every person to avoid any difficulty which under careless management might occur.

As to the different varieties which some nursery-men offer for sale under the name "giant," "large Dutch," &c., &c., we think they will become giant if given giant culture.

THE GARDEN AND ITS APPROPRIATE WORK.

ED. FAR.'S MAGAZINE:—Your March number of the Farmers' Magazine reached me a day or two since. It is always a welcome visitor, and without intending to flatter you, permit me to say, in my opinion, it is one of the best periodicals of its class. Your editorials carry with them the impress of truth, and I place confidence in the articles you endorse. (1.)

You ask farmers to write for your Magazine. To young farmers, you say, short and to the point. To an old fogy like myself, who has been knocking clods, and planting trees, for forty years, you will allow greater latitude. (2.)

The notice of honey blade grass in your February number, has attracted some attention, and I was asked to join a club to get a lot. I advised to wait awhile, stating as a reason, that it was probably the Hungarian grass, dressed up with a sweet name to humbug the unsuspicious. Your remarks in the March number since received corroborate my opinion, and I endorse every word you say in that article. To deal justly, love mercy, and walk humbly are rare attainments, and yet they are clearly Christian duties. (3.)

The winter is over and gone. The wild geese are passing to the more Northern latitudes. The sweet little birds of Spring are singing around us. The clear note of the lark, the cooing of the dove, the warbling of the robin and red bird with the twittering of the sparrow, remind us that it is time the garden was shaded and the seeds of early vegetables committed to the soil. Yet little of this work has yet been done, notwithstanding we have had a mild winter. We have had but two very light snows during the winter in this county. But it has rained almost every fourth day since November. Slush water and very bad roads, have been the order of the day. Fruit trees that I renewed in November, when my holes were all dug, and filled with fresh mould, I have set out this month. The season being so wet I could not do it earlier. I plant peach trees every year, and rarely miss putting out a few apple and other trees, consequently I have a fine orchard. (4.)

My orchard embraces about one hundred varieties of apples, some sixty varieties of peach, with ten or fifteen varieties of pear, some nectarines, apricots, prunes and damsons, with the smaller fruits in some variety, including grapes, raspberry, gooseberries currants, &c. My apple trees have mostly been set within the last twenty-five years, and are now in fine bearing. The fruit trees were procured mostly in my native State, but embraces many of the fine varieties of the North. Thirty years ago I got some very fine peach fruit from Prince's Nursery, Flushing, N. Y., and from Burlington I also got fine apple and peach fruit. Our nurseries in Virginia were then in their infancy. Within the last twenty-eight years several gentlemen in Virginia have turned their attention to the nursery business; and without going from our State we can now get every thing in the way of fruit culture that is desirable. There are half a dozen nurseries immediately around Richmond, Va., among which are Messrs. Joseph Sinton & Sons, Jamestown, Va., Mr. Morton, & Mr. Eggleson near Fredricksburgh, Va., Mr. Henry R. Robey has a very extensive nursery, near Staunton Va., and Mr. Franklin Davies has near half a million trees, shrubs, &c.

Thus you see there is no necessity for Viginians going abroad to get select fruit, as we have some of the very finest seedling apples here to be met with anywhere. Amongst my

best fruit for winter varieties, I mention the Albemarl Pippin, the Green New Town Pippin, the Swarr, the Spitzenburg, the Spy, Rawles' Jannets, Wine Sop, Prior's Red, Beghill, Pomme de Apie or Lady Apple, American Nonpareil, or Domine, New York Pippin, Male Colen or Carl, Duck Pond (a seedling), Belle Flower, and Baldwin. For Fall fruit; Fall Pippin, Seek-no-farther, and Rambo Fall Cheese are among the best. For Summer, Astracan, Red, Symm's Harvest, Junating and Summer Pippin. I have too many varieties by three-fourths and yet I can't let a good apple pass without sticking in a graft. Fruit cultivated for market should not embrace more than eight or ten choice varieties. (5.)

I will not close without saying something about the wheat crop, which I am sorry to say looks rather badly, and on thin land, has been badly Winter killed. Where well manured, or it has had a dressing of guano, it will make a fair crop.—There has been a good deal of Winter plowing done and I fear much of it too wet, as the past has been an almost unprecedented wet Winter.

I have not housed my sheep during the Winter, and have scarcely fed them anything. They had an open shed to resort to but rarely occupied it, laying under the cedars, getting grass plenty to keep them in fair condition in the open fields.

There has been little or no oats sown yet, on account of the rains; and gardens are backward from the same cause.

The apricot and peach are beginning to bloom, and if not killed by frost, the crop will be abundant. We never, however, consider our fruit safe in the Valley of Virginia till the first of May, and I have known heavy frosts here as late as the 10th of May.

If you can cull anything from what I have written worthy of a place in your Magazine it is at your service.

(6.) Yours &c.,

HY. B. JONES.

Near BROWNSBURG, Va., *March* 21st., 1859.

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(1.) We do not publish one in a hundred of such testimonials, and we insert this only as an introduction to what we regard as one of the most practical and useful communications we have this long time received.

(2.) Yes, we ask farmers to write, because we believe they can accomplish a great deal of good by it to themselves and to each other. A good thing done by one farmer should be known and imitated by others. How many of our readers will give us, like the writer of the above, a little of their own fresh experience?

(3.) Certainly they are. *Believing* rightly is important, but *doing* rightly is more important. The latter is the "butt end" of all religion, and no religion is worth a fig without it.—We will not pause to demonstrate a self-evident truth.

(4.) Note that filling of the holes with mould, as a thing to be imitated. No green manure should be used. As for old composted manure, farmers want it for the corn field and the mow-land. You may grow fruit enough to live upon like our first parents in Paradise, and not subtract a particle from the manure heap. There is mould enough on any farm for the purpose. It is well to mix ashes or

lime, or both, and a few broken bones.

(5.) The remark about varieties is important. A few varieties, not over ten or a dozen, and those of the kinds best suited to the locality, are better than more.

(6.) We publish the whole, and wish there were more like it, though as a general rule in favor of short articles. Please let us hear from you again.

STAKING DOWN TREES.

The following represents a mode of fastening young trees to their place, practiced by A. S. Fuller, Horticulturist, of Brooklyn, L. I., and recently recommended by him at the Farmers' Club in this city. It seems to possess important advantages over the more common way of driving stakes and tieing the tree to them;—1st, the appearance is neater; 2nd, there is no danger of chaffing by the wind; 3rd, this mode allows some motion to the tree, without much disturbing the roots. The bending of a tree before the wind is said to be conducive to its health. If a tree were confined immovably, it is believed, it would not be so healthy nor grow as strongly. Like animals, the tree is supposd to be—within certain limits—benefited by exercise. The staking of the roots, therefore, and leaving a slight play for the stem is more favorable to its healthy development.

C, C, the stakes in their place; A, the untrenched ground; B, B, excavations filled with stones, to drain the water from the roots in too retentive soils.

The following small cut represents one of the stakes as seen above ground.

PEACH TREES.

Now is a good time to transplant. In selecting varieties, it is well to have a few of the very early kinds and a few late, but the majority medium. In this way you may have peaches from July till late in November.

Do not plant too deep. The transplanted tree should stand as high at

least as it stood where it grew, and if the ground is clayey and tenacious an inch or so higher. Small trees of one year's growth, are better for transplanting than larger ones. Cut off the side shoots, leaving the stem with a small tuft near the top.

Now for the trimming. It should be cut back the second Spring (one year from transplanting) to within two feet or two feet six inches of the ground. Of the new shoots, which will put out, let enough grow to form a handsome, well-shaped head. Cut the surplus clear with the stem.

For the after trimming, cut back each year, in January, February or March, or in April if you have neglected it till then, (better earlier,) from one third to one half of the previous year's growth; and occasionally pinch in rampart shoots during the Summer. It is easy to preserve for the peach tree a regular, oval form, by now and then, as you pass it, pinching the extremity of a straggling shoot between the thumb and finger.

Peach trees should be in ground that is kept under cultivation and enriched by fertilizing manures. A medium soil, not over sandy nor at all clayey, is the best soil for the peach. But they will do well on clayey soil, if thoroughly drained.

The practice of renovating old peach trees, by cutting off the entire heads and leaving them to form new, has often been resorted to, and sometimes with good success; but as peach trees are easily grown from the stone, and can be engrafted with great facility, it would seem better economy to raise new ones, except in cases where a tree has given uncommonly fine fruit, and you feel unwilling to part with it.

Pope was wont to exclaim, on sudden emergencies, "God mend me!" On once stubbing his toe upon a stone and making the usual exclamation, "God mend me," a wag of a boy muttered in his ear, "Easier to make a new one." We think as much of the old peach tree. It is a mighty easy thing to make a new one. It will be more likely to be healthy, and the time required is but two or three years—and, by the way, the new should be growing before the old fail, that there may be on the farm a succession of young and healthy trees.

If you grow from the stones, do not let them become dry. Plant in peach time, or if that is not convenient, put the stones in a hole dug in the ground for the purpose and cover over with a flat stone. In this way they will be kept moist, and will be cracked open by the frost, and in fine condition for planting in March or April.

Farmers, or if they will not, farmers' boys, should plant peach stones every Spring. They may save the stones the Fall before, as we have described, or if they have not practiced the fore-thought to do this, they may take up the young trees from under the old ones just as they spring up from where the stones were dropped the previous Autumn, removing them one at a time with a spade full of earth to the place where they wish the young trees to grow.

It is an easy thing to bud young peach trees in August. Some person near you knows how, if you do not, and can show you in five minutes, so that with a little practice you can do it to perfection. Plant a few stones

every April. Bud in August (the time is, when the bark peels easiest) and you will always have this delightful and healthy fruit, and even if you should experience a hard Winter, and it should kill all, you can even then get peach trees to bearing in three years. It is well to put some of your peach trees in very cold situations, others in warm, and others in medium, as you will thus be less exposed to loose them all in any one year; and the fruit of all will not be as apt to be nipped by the same Spring frosts. Since some years the late swollen buds are the ones to be blighted, while on others and more generally the early swollen fare worst.

It is well, therefore, to have some trees in a sunny spot, where the buds will be swelling in January, and others in sunless places, where the buds will hardly swell till May. The latter will not, of course, give as delicious fruit, but it will be better than none.

The peach is a remarkable healthy fruit. The iron contained in its juice is one of the best tonics in the world, infinitely better than the doctor can prepare from his preparations of iron, and it is certainly no bad medicine to take. The peach, fully ripened and eaten in its best condition, is anti-febrile, anti-debility, anti to all the diseases of the season. Who ever heard of persons being made sick by eating good, ripe, sound peaches? Some may have been, for there is such a thing as gluttony, that no constitution can withstand the evil effects of, even in the most wholesome food.

But for every one that has been sickened by eating too many peaches, thousands have escaped disease, that would otherwise have befallen them, by eating enough.

Now farmers and farmers' boys, yes, farmers' wives and daughters, for they have an interest in this thing, and the work is almost within their province, plant the peaches in April, bud them in Aug., transplant them next Spring, if they are not already in the right place, and three or four years out of five you shall have a plenty of this delicious fruit, not by purchase, to be partaken of sparingly, but, by the gift of God and of nature, to be indulged in without stint.

And let us tell the ladies, if it will stimulate them to throw woman's power on the right side of the question, that peaches freely indulged in from July to November, contribute more to give a clear skin, a bright eye and a merry heart, all of which are good baits, than a thousand greasy things too often found at our breakfast tables. So don't let this Spring pass without smiling on the boys' attempts at peach growing, even if you make none of your own.

ON THE VINE.

A Translation from the Italian, by Mr. George Jones, of Savanah, Ga., Showing the Method of Culture as practised in Lombardy, and other States of Italy, for the "South Countryman."

1. If there is in agriculture an interesting product, without doubt it is that which the vine furnishes to us. This forms the wealth of many countries of Italy, also of various districts of Lombardy, of dry places especially, where the vine always succeeds best.

2. The vine is propagated by layers, offsets, and suckers, loves strong and clayey, but also, fructifies in sandy.

poor and foxy soils, because they have always much salt. On the contrary, the product is small and bad in a moist, miry, fat and greasy soil. The best exposure for this plant is the east and south. It may also be planted in situations which incline a little to the west, but succeeds badly when placed to the north. On hills it grows better, and produces better grapes than those in the plain.

3. *On Nurseries.* If one has an extensive property, it will be well for him to keep a nursery expressly for raising vine plants, called, in many places, root cuttings. These plants serve not only for new plantations, but are in a certain way useful assistants in restoring the vines to the rows, when, by some accident they have failed. One should be careful in planting a nursery, to choose well the cuttings or twigs which one may wish to place there because the care of the agriculturist should always tend to the propagating of plants, the best for yield and quality. A plan for attaining, with certainty, this important object, is to observe the vines at the time when the grapes are still hanging upon them, designating, with a string, all the best, in order to take from them the cuttings with which to plant the nursery. One must observe in the selection, not to indulge too much in white grapes, because, in Italy, the consumption of white wine is not one-eighth in comparison with the red; it is necessary, also, to guard against selecting the quality denominated "*rose*," because it produces a weak wine, without color, and which keeps with difficulty, even when placed in cold cellars.

4. In Italy, those vines are preferred, which the people of the country call brescia, pine-apple, and balsam, white and red, because possessing a harder and less porous wood, they resist, better than the other kinds, the frost and cold. Besides which they yield more abundantly, and of better quality, and being tardy in putting out their tendrils in the Spring, are not easily exposed to the late frosts.

5. The black grapes, which by our Italian agriculturists, are the most esteemed, because of their better quality and productiveness are those which are called, *brescia, crapella, raven, pine-apple and Cassel*, because it abounds in that district. The *muscat*, the *orcasia* and the *balsam*, are much prized, because they not only produce the best and most delicious grapes, but also, deep colored and enduring, having much greater body than those of other vines of the common species.

6. Among the white grapes, those are distinguished which are called *malvoisie, musatelle, casalina, galetta, brumesta*, or winter grapes.

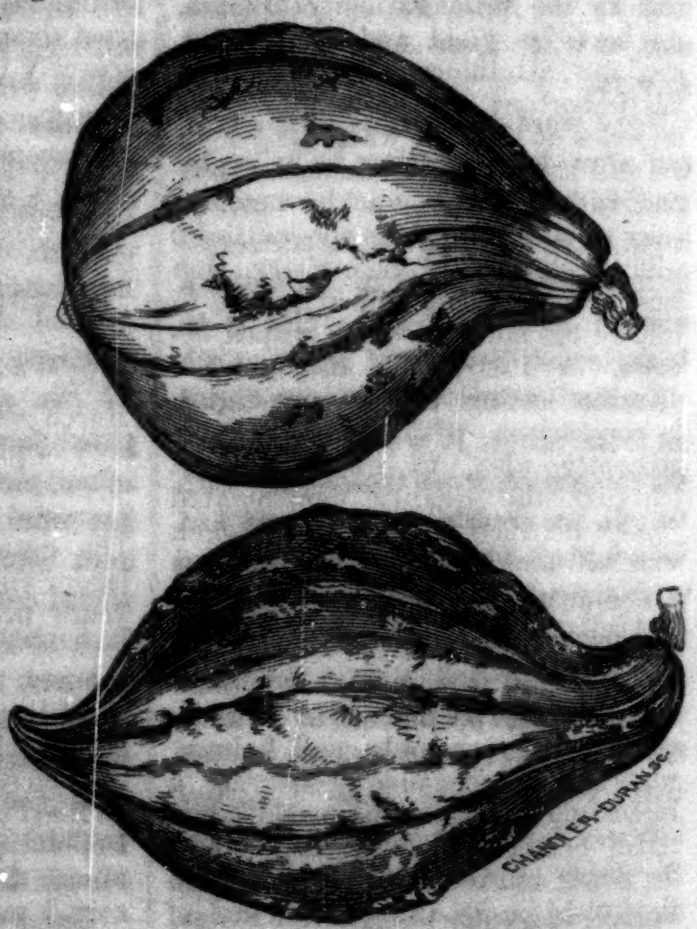
7. Some proprietors have introduced into Italy the vines of France, of the best quality, and have obtained from them the most exquisite wines, scarcely inferior to the French wines.

8. The vines are cut and selected in November, from wood of one year's growth, leaving at the lower extremity about sixteen inches of two years' growth. The cuttings tied in small bundles should be set under the ground at a distance of four inches apart, so that in winter they may not freeze. Then about the middle of March select, for planting the nursery, a place exposed to the sun, and of soil sandy or soft, already dug and prepared in the preceding November. The cuttings are planted from the larger end, so that the growth of two years may produce roots, and the tops of one year's growth may form the new shoots. They are planted in right line so that each plant shall be eight inches apart, and each furrow of sufficient distance to pass a hoe to be used in weeding and hilling them. In planting the rows there is sprinkled along them an abundance of well rotted manure, and the cuttings are

planted and covered with earth in such a manner as to have above ground only their tops. In the Spring and Summer of the first year one must cleanse them from noxious weeds whenever they require it; and in March of the second year they must be hoed with small hoes, which can pass between each of the cuttings without injuring them; also cleanse them in Summer from all noxious weeds whenever they require it. After they have completed the two years of planting the said cuttings of the nursery are cut close to the ground, leaving to them a single eye, and they are diligently hoed, enriching them at the time of hoeing, with old and well decomposed manure; then they are attached to stakes, upon which the tendrils may climb and grow with greater vigor. One must pay attention to the cleaning in Summer, in case there is grass. From November to March one may then effect the transplanting to the fields, as we shall see afterwards. But the nursery vines will turn out stronger and more robust when one defers to cut them in the nursery until the third year, computed from the time when they were planted: for in one additional year they spread their roots more, the cuttings also increase much in size, recovering in this manner in the field, the year which is lost in the nursery.

HUBBARD SQUASH.

The following are exact delineations of two samples we have seen. A third was represented in our last. Mr. Gregory [see advertisement] sent us three great squashes, together with moderate pay for advertising. One of them we gave to a friend; one we ate in our own family; the other we are reserving in a cool place to test its keeping properties. Of the first, our friend says it was very good, but that might be to please us—a sort of "thank you." The one we ate at home *was* good, "and no mistake."—The third acts as if it would keep till June—but that is not known yet.—With full liberty to say what we please, not being under the semblance of an obligation to the advertiser; for the squashes and money only paid the lowest price for advertising, we have decided that the Hubbard Squash is a good thing, and that we will say so, both from our little experience with it, and from what others of more experience tell us. Grow it



according to Mr. Gregory's directions, and if it does not pay, charge the balance to us. There is no humbug about it.

A WORD ABOUT TREE PLANTING.

An exchange says; "let a tree be set so as to be two inches deeper than it stood in the nursery; let some of the manure come to the roots; and when the hole is nearly filled pour in half a bucket of water."

We would set it just as low as it stood in the nursery; would carefully exclude all manure from the roots, letting nothing but clean soil touch them; and would pour the water on the ground at a little distance from the tree, so that it should reach the roots in the same minutely divided state, as when trees are watered by showers.

If you were going to neglect a tree ever after transplanting it, it might possibly live longer if set two inches lower than it stood in the nursery; for in that position it might stand a severe drouth. But if the tree is to be neglected, better not set it at all.

As for letting the manure touch the roots, unless it were well rotted and composted most thoroughly with the soil, we certainly would not; and we would about as soon swallow mud pills to cure the dyspepsia, as to put the lacerated roots of a tree into a bed of mud. The soil should be in a moist, but purverulent state, so as to fall into the cavities in a natural state; and then in order to afford sufficient, but not redundent moisture, the water should be left to trickle through as gently as in a rain storm, filtering itself as it passes.

In this way it would come to the roots as limped as pure fountain water. Who ever thought of applying muddy water to a fresh wound? And yet nothing can be more grateful than fresh, clean water slightly warmed. An ordinary cut, on a a healthy person, will heal in twenty hours, if kept moistened with fresh water and secluded from the air. You have only to apply half a dozen thicknesses of linen, to keep them moist with water only, no rum to keep out the cold, and the healing process will go on of itself, and that rapidly and without pain.

It is so with wounded roots; they should be moist but not drenched, and above all should not be smeared with mud. The truth is trees will live in spite of a flood of water at setting; but they will be more sure to live without it, and will do better.

These are our *notions;* but it is well that our readers can follow whose notions they please.

GARDEN WORK FOR APRIL.

Spring work is now on hand, and we can see how well we have prepared for it. Are the hoes, spades, rakes, plows, &c., &c., in good working order; or have we let the Winter pass without thinking that Spring would come again, and with it, work that must be done now, or be put off another year, and then find us no better prepared for it than we are at the present time.

Is your garden ready for seeds and plants? if not, it should be, and the sooner the better.

Early cabbage can—in most localities in this latitude—be planted with

safety. Lettuce, spinach, peppergrass, radishes, &c., should now be growing in the open ground.

Onions of all kinds should be put in as soon as possible. The top onion, or potato onion, if put in this month will be ready for use in June.

Salsify should be sown in soil that is very rich, (made so with old manures,) for it is a root that is of little use if not well grown. With ordinary culture it is too small, and hardly worth preparing for the table. But when of good size, we think it one of those vegetables that are indispensable, and should be always at hand when wanted.

Early peas should be sown now. Daniel O'Roake is perhaps the earliest variety to be had in our market.—Dwarf Blue Imperial comes in a few days later, but is a much better variety. Those who grow for market of course will take the earliest kinds, as a few days make a great difference in the price.

Watch the hot-beds.—Let nothing suffer there. Pinch off the tops of all plants that are growing too tall—do it thoroughly. If the first pinching was not sufficient, pinch it again, for there is but little danger of making your plants too stocky.

If you have made cuttings of currants, grapes, roses, ornamental shrubs, &c., now is the time to put them in; have the soil dug deep so that they will not suffer for moisture. In planting your grape cuttings leave but one eye above ground. Currants should be left about two inches above ground; let the earth be pressed firmly about them.

Cherries can be grafted with success if it is done early. Pears and apples can be grafted at any time until they begin to show their leaves; but it is better to do it in time than be too late. Grape vines can be grafted after the leaves are an inch in diameter; the grafts should be fresh, but not started at all. Insert the graft just below the surface, and cover it up, leaving only one bud above ground.

After planting your currants, raspberries, &c., &c., if you have a spare place, plant a filbert—one of the English or Kentish varieties—and you will be surprised at the amount of fruit you will get from one of these much-neglected trees. Why the filbert has been so much neglected we cannot tell, as it is perfectly hardy and will grow and bear fruit in almost any locality, and the fruit always brings a good price in our markets. No garden in England would be thought complete without a hedge of filberts, and why should it here; all that is needed is to plant them, and you will soon have enough and to spare.

Uncover your strawberry, spinach, cabbage-sprouts, and other plants that have been covered during the Winter.

Raspberry plants should be trimmed and tied up to stakes.

Blackberries should have their branches shortened and tied up to good strong stakes or trellises.

If your strawberry bed is getting old, plant a new one; if you do it now they will bear a full crop next season.

Leave nothing undone that should be done in the Spring; if you do, another year will pass by and you will be one year older, and have one

year less of many little pleasures that you might have enjoyed if you had begun one year sooner.

CORRECTION.—In our last, the printer (perhaps because we do not write plainly enough) made us speak of Dr. Darlington's work on "Weeds and Useful Plants," as a book of one hundred and sixty pages. It should have been four hundred and sixty. Quite a difference in a work of so much value, though it must be confessed that the smaller many are the better, because it requires less of valuable time to ascertain that they are good for nothing.

LANDS FOR AGRICULTURAL INSTITUTIONS.

MR. NASH; *Dear Sir*:—I enclose one dollar for a year's subscription to your Magazine, to be mailed to Mr. S. B. of this place. Commence where his subscription terminated, or with the new series, as best suits you.

Can you maintain anything like a suitable composure of mind, in view of the President's veto of the bill appropriating a small amount of the public domain, for the promotion of the greatest interest, of the greatest number of American people.

He would seem to have no conscientious or constitutional scruples about approving a law bestowing millions of acres on old and dead soldiers who never earned the value of a rod in glory or utility to themselves or their country.

I wonder the farmers in the land do not exert their power and privilege to elect representatives who will obey their clearly expressed will in regard to this paramount interest.

With much regard, your friend,

A. D.

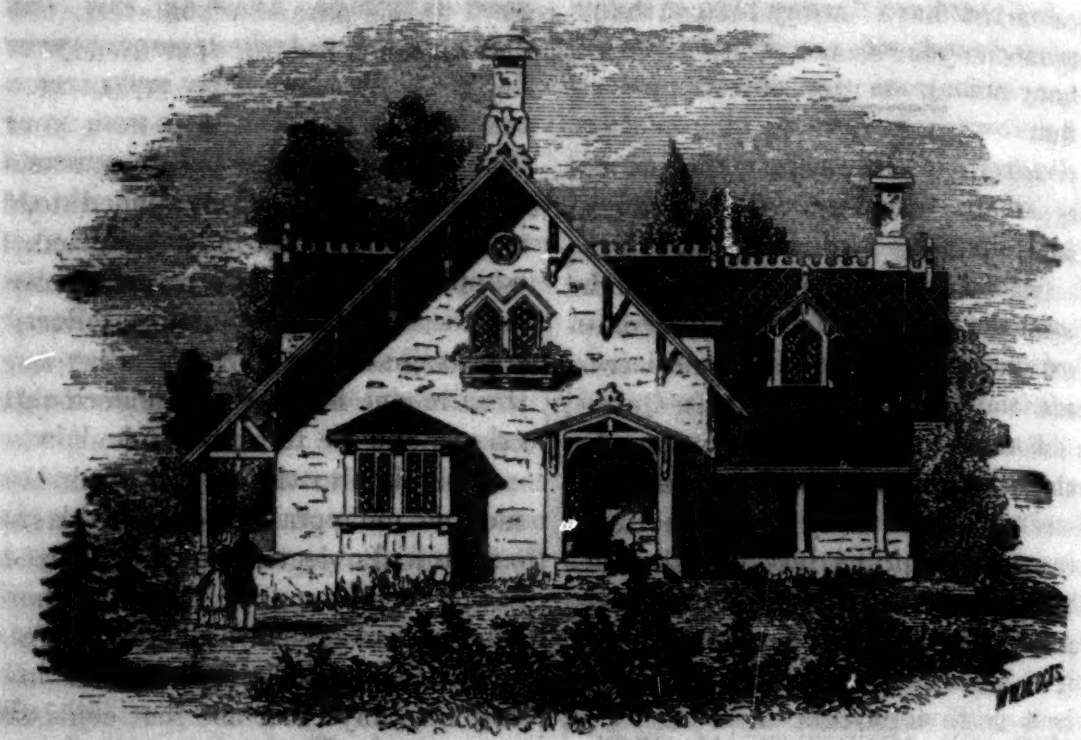
That there are serious objections to the land distribution alluded to, we have heretofore fully admitted. Misappropriations and erroneous procedures would undoubtedly follow the passage of Mr. Morrell's bill.

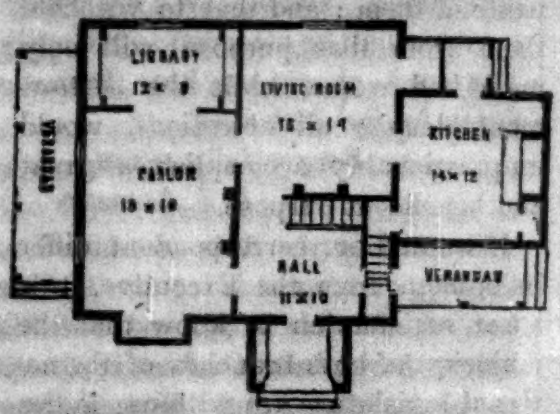
In a recent number we undertook to show, and we think we did show, conclusively, to intelligent minds under no unfavorable political bias, that the real objections to the appropriation of the public lands to the furtherance of agricultural knowledge are at least three times greater in relation to any other use that can be made of them; and that to withhold them from that purpose will only make bad worse, while the bestowment, despite all objections, would unquestionably accomplish a great and beneficent purpose.

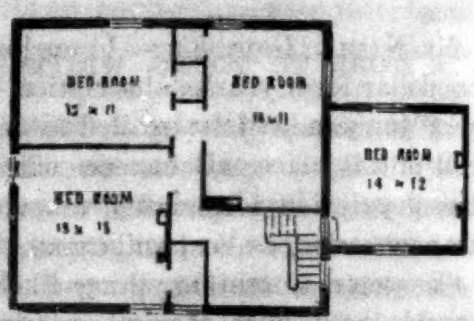
If we and our correspondent differ in opinion from the Executive, it is some satisfaction to know that the majority of both branches of the national legislature are with us; that a large proportion of the reflecting men of the nation think as we do; and that probably agriculture will demand and receive its rights at no distant day. Erring in judgment, or not, we are certainly in good company, and may as well keep cool. But let us ask till we receive.

☞ It is estimated that there will be taken from the waters of Virginia during the nine months ending with June next, no less than 8,808,492 bushels of oysters.

RURAL COTTAGE.







In pursuance of our design to present occasionally a drawing of a neat and tasteful, but not very expensive, country residence, we give this month the above.

Looking at the elevation one would say, that is not a suitable structure to be placed upon a hill, nor on a broad open plain, nor in any other situation in which it would be viewed from a distance; for a secluded nook by the water's edge, or in a bend of a highway, and especially if nearly hidden by trees and shrubs from all distant views, nothing could be prettier.

The elevation, ground plan and plan of second floor sufficiently explain themselves, as regards the position and size of rooms, their relative position, access, &c., &c.

The expense of such a cottage—we are told by those who ought to know—is but a mere trifle more than that of the plainest structure that can be built. For our own part we are fond of the plain. As in female beauty, so in architecture, there is that which is

"When unadorned, adorned the most."

But there are "many men of many minds," and we are glad that so many among us are able to indulge their own fancy, as it affords them pleasure, and offers a pleasing variety to the stranger passing their dwellings.

We commend the foregoing to the consideration of persons having it in contemplation to build a house in a situation to which it is adapted.

A taller house would enclose more space proportionally to the extent of roof to be maintained; one more nearly square would give more room in proportion to the siding; the foregoing plan would give a pretty house, if in the right nook, and would not be a wide departure from the most rigid economy.

A WORD TO YOUNG WRITERS.

When you undertake to write for the press, write only on one side of the paper. Divide what you have to say into sections, or paragraphs. The eye wants a resting place. Commence the first word of a paragraph a little in from the edge of the paper. All the lines should leave a margin, say of one inch from the edge, but the first line in a paragraph should be let in a little more.

Whatever you have to say on any topic, say it in the fewest words. Be sure and use such words as you understand yourself, and then the reader will understand them. Never hunt the dictionary for great, or uncommon words, but use such as you would in talking to a friend.

If you would be a good writer, you must be a good talker, or, in other words, you must be particular to use good language, avoiding low and vulgar phrases, and expressing your thoughts with simplicity and correctness. Talk at all times with your friends in such a way, that it would not disgrace you, if a reporter should be present and take down your exact words. If you do this habitually, and occasionally practice writing, you wi'l soon write well, for writing is little else than putting a good talk on paper.

In letter writing always put the date on the right, the address in the left, and the signature on the right, thus:

St. Louis, Mo., April 2, '58.

James Jarvis, Esq;

Dear Sir,—Yours of the 25th ult. is received. The business you charge me with shall be attended to promptly. You may expect to hear from me again by the 10th inst.

Respectfully yours,

A. J. Andrews

Sometimes the date is omitted, at the top, and is put in at the bottom, but on the left hand, and one line below the signature, which is always to be on the right. Now a letter might answer the purpose if every one of these rules were trampled on, but it is well, when we do such things, to do them as all educated ple do.

In writing a letter on business to any one with whom you are not especially intimate, it is best to be short and to the point, as in the case above, where the sole object was to inform the person addressed, that his order was received and would be executed within a week or so. When writing partly on business, but to one

with whom you are on terms of intimacy, and especially if the business of which you write is of but secondary importance, it is well enough to indulge in a pleasant introduction, or what perhaps is better (on the ground of business first, and then play) to dispatch your business first, in a few lines, and then indulge the playful mood.

A very fine specimen of commencing merrily and ending with the sober matter of business, is in a letter we lately received from a friend, whom we never saw, but still regard him as a friend, as we believe he does us. It begins as below, and we publish the beginning only, but omit the rest, as the business part of it is our own. He says:

"*My Dear Sir*:—I should have replied to your note ere this; but for the reason of great inconvenience and vexation suffered on account of the the failure of my acqueduct. I have been experimenting in 'hydraulics' for weeks past—the water having failed at both house and barn. But perseverance has at last resulted in success, and the article which Moses, as we read, brought out of the rock, once more gladdens the household and the herd.

"Of all the ills that ever fell
On Adam's son or daughter,
The chief is that when fails the well
The well of good, cold water!

"There! I did'nt mean to rhyme it, but it is no less the fact."

THE ONION MAGGOT.

I know not, Mr. Editor, whether you have been in a situation to witness the ravages of this insect, and to trace the peculiarities of its origin, diffusion and operations; but if you have not, you have yet much to learn, and an extended field for doing good. But without presuming to go over the entire fields, I wish to avail myself of your chemical discrimination to know whether a remedy recently prescribed can be relied on as effectual.

I have seen it stated that a free application of pulverized guano to the young plants, after the insect has commenced its operation, will restore it to health and vigorous growth.—Can this be so? I respectfully doubt. I know that many fields of onions have suffered greatly by the maggot, when they have been dressed with guano before the seed was planted; and I have no reason to think that there is that healing power in this fertilizer that will restore the plants to vigorous health when impregnated by the worm that springs from the egg laid by a small fly just as the bulb begins to form.

I know that my neighbors have looked upon their hopes as blighted when they see their plants withering under the influence of this destroyer.

Will you tell us what you know about it. J. W. P.

Essex Co., Mass.

We know nothing of this matter. If guano will produce any good effect, it must be by repelling the fly, and not by healing the plant after the mischief is done. Will some one who has experience in the raising of onions give us something on the subject?

☞ Indulging in dangerous pleasure is like licking honey from a knife and getting cut with the edge.

POULTRY AND EGGS.

It is said that the poultry value of the United States is about $25,000,000; that of N. Y. State, $3,000,000; and that the city of New York pays $2,000,000 a year for eggs. This last would not seem to be an extravagant consumption, for it would allow but seven mills per day for each resident, or about five cents per week, amounting to but $2.50 a year.

One million's worth of eggs, it is said, are sold annually in Boston at the Quincy market alone; and a single dealer in Philadelphia ships a hundred barrels of eggs daily to the New York market. At the rate of consumption in Boston, even if no eggs are sold in that city except at the Quincy market, New York should consume five instead of two millions' worth.

We should be sorry to have it believed that the people of New York consume twenty-five millions' worth of tobacco and one hundred millions' worth of bad liquors a year and only two millions' worth of eggs, lest it should be suspected that the tastes of the people are getting perverted.

According to Professor Johnson, the carbonate of lime in the shell of an egg constitutes one tenth of its weight, the yolk three tenths, and the white six tenths.

HOME AMUSEMENTS.

Ed. American Farmers' Magazine;—Much may be said upon the above subject. Their simplicity and cheapness do not measure the amount of good they would confer if they were only adopted throughout our worthy farmers' homes. If not found there, the farm will wear a more desolate appearance than any yet known spot on earth. In our cities there are many temptations to entice all young men to spend the long Winter evenings abroad, when it is impossible for them to find enjoyment at home, and at the same time to spend money and health recklessly.

But a majority of our farmers' homes could not carry out such proceedings if they would, yet theirs may be happy homes if innocent amusements adapted to the different ages of the inmates be judiciously provided.—Everything which affords cheerfulness, gayety and delight to the home circle should be courted. It is not only the hearts of the young members of the family that are made merry by it, but the older sons and daughters are made happier and better and more contented, by the genial influences of a home ever cordial and mirthful; while the hearts of the old folks rejoice and grow young to witness the innocent pleasures which prevail. If mothers wish their sons to be shielded against the temptations they are surrounded with, and if sisters love the company, conversation and affectionate regards of their brothers, they will do well to try and make home a place of pleasant associations and harmless amusements. They will thus bind many a son and brother as with a golden cord.

J. W. J.

AGRICULTURAL EDUCATION.

The appropriation of funds by Congress for establishing and supporting agricultural schools and colleges must awaken much interest among the friends of agriculture. By many

it will be hailed as a harbinger of brighter days. The veteran editor of the *Massachusetts Ploughman* sighs heavily and seems to be fearful that a heavier burden will be rolled back upon the shoulders of the sober and industrious—fearful that they will prove fruitful in the manufacture of puny students, possessing no physical strength and therefore wholly unfit for the manual labor of the farm.

But there are friends of the cause who—knowing the value of knowledge to the farmer, and perceiving how his private interest may be enhanced by its possession—have gratified themselves and engaged in the work of instruction, but receiving neither the favor of those placed in official stations, nor the support of the farmer, have been thrown upon their own responsibility to pursue their calling as best they could.

The circulation of periodicals and books is doubtless productive of good results, and many a farmer has been benefited by their perusal, but the attainment of a knowledge of scientific terms and substances must be attended with much difficulty when a person is unaided, especially if the individual is already engaged in the active duties of life.

If the agricultural community is beginning to perceive the practical value of the teachings of science, it would seem nought but unpardonable neglect to suffer its teaching to be lost. A knowledge of the chemical composition of the soil and its products is as essential to the farmer as is skill in the use of his implements, and he who would contend successfully with a soil robbed of its primitive fertility, should avail himself of all the light which science sheds upon his labors. Many an ambitious youth after receiving a few months' instruction, would discover within the limits of the "Old Homestead" elements of wealth sufficient to satisfy his desires, and would engage with delight in the renovation of a worthless swamp, or the protection of a wasting manure heap, both of which would speedily reward him for his toil; whereas, had he never received that instruction, the dull routine of the farm would have proved nothing but irksome drudgery, or perhaps he would have been captivated by the facination of city life, where he would soon learn to his sorrow that "all is not gold that glitters," and if not inveigled into haunts of vice would perhaps lead a life of far more servile labor than that of the farm.

After the busy season of haying there is a season of comparative leisure until Spring opens again.—Now if the sons of farmers could be brought together and instructed in those branches which relate to their calling, I apprehend that instead of seeking to avoid the labor of the farm they would engage in it with fresh delight, and act with a degree of certainty, since the fog had been dispelled from their minds.

Shall those who pursue a branch of industry which is at the foundation of national prosperity be left to struggle unaided, catching instruction only between the weary hours of toil, while large sums are appropriated for the support of institutions where those who intend to pursue a professional calling may be instructed?

J. C. K.

Deal Gently.

BY GEORGE W. BUNGAY.

For others' weal let good men labor,
And not for fame or paltry pelf—
And mind the maxim, love thy neighbor
As well as thou dost love thyself.

Deal gently with the erring brother,
Forgive, as thou wouldst be forgiven,
If here we love not one another—
How can we dwell in love in heaven?

And should thy feeble brother stumble,
And often fall upon the road—
Though poor, despised, deformed and humble—
Just raise him up and point to God.

Crush not the heart that's almost broken,
But light up hope and banish fear;
A pleasant word when softly spoken,
Will heal the wound and dry the tear.

Can we forget our own behavior?
Can we for all our sins atone?
Let him who needs no blessed Savior,
Be first to scourge or cast the stone.

Oh, let us make the world better,
Than t'was the day it gave us birth—
By breaking ever yoke and fetter,
And spreading light and truth on earth.

And then we shall behold the dawning,
Of good times we sought so long—
The light of that millenial morning,
Of cloudless sun and ceaseless song.

A MISTAKE CORRECTED.

At a late meeting of the American Institute Farmers' Club, we stated, on the testimony of many farmers who have tried it, that the Greensand Marl will give three hundred bushels of potatoes to the acre, on land that would produce but two hundred bushels without it. Unfortunately, we were reported as saying, "on land that would produce none without it." On remonstrating with the reporter, we received for reply, that "the statement was all the stronger." Sure enough; but strong statements are not so much to our liking as true statements. We wished to inform all whom it might concern, that the Greensand is an excellent fertilizer, that on land otherwise suitable and suitably prepared for potatoes, it will greatly increase the crop. That it would make them grow at the rate of three hundred bushels an acre on land where they would not grow at all without it, would be more than we could swallow, and that we certainly would not be guilty of trying to put down the throats of others. When will agricultural writers, and when will reporters consent to be a little more truthful. To increase a crop on land of fair capabilities is not quite the same thing as to create three hundred bushels an acre out of nothing.

☞ In land measure, 144 inches make 1 foot; 9 feet one yard; 272¼ feet, 1 rod; 160 rods, 1 acre; 640 acres, one mile, or one section, as denominated by the United States Government; 320 acres, one half section; 160 acres, one quarter section.

☞ In long measure, 8 barley-corns make 1 inch; 12 inches, 1 foot; 16½ feet, 1 rod; 320 rods, 1 mile; 69 miles, (60 geographical miles,) 1 degree; 360 degrees 1 circumference of the earth.

HONOR TO LABOR.—Two men I honor, and no third. First, the toil-worn craftsman, that with an earth-made implement laborously conquers the earth, and makes her man's. Venerable to me is the hard hand—crooked, coarse—wherein, notwithstanding, lies a cunning virtue, indefeasibly royal, as of the sceptre of this planet. A second man I honor, and still more highly: him who is seen toiling for the spiritually indispensable, not daily bread, but the bread of life. These two, in all their degrees, I honor: all else is chaff and dust, which let the wind blow wherever it listeth.—*Carlyle.*

RELIGIOUS PUBLICATIONS.—At the recent anniversary of the T. S. of the Methodist Episcopal Church, it was stated that the Methodist Book Concern in New York publish annually 3,334,321 volumes. Its daily issues are 11,147 volumes; its hourly, 1,114 volumes, and 18 every minute during its working hours. The circulation of religious periodicals every year, issued from the Concern in New York and Cincinnati, ammout to 9,888,295 copies.

☞ The British Museum has a collection of about 30,000 books published in the United States, which is more than double the extent of any collection of American books in our own country.

Grandpa's Letter to Boys.

LETTER FIFTH.—SPEAKING THE TRUTH.

Well boys, in my last letter I warned you of the danger of bad company. This is generally the starting point of all who run a wicked course. I hope you have resolved always to choose the best boys for your companions.

There are many bad habits which boys are apt to fall into. I will mention some of them in order that you may be on your gaurd. First, Is a *want of regard for the truth*. This is a common fault among boys. They will not hesitate to tell a falsehood, if by so doing they can gain anything, or screen themselves from punishment. I hope you will never be guilty of such wickedness. There is no better evidence of a bad heart than this. Truth is a most sacred thing—too sacred be trifled with on any occasion.

When a boy once loses his regard for truth there is no crime too great for him to be guilty of—I would not trust him on any account—he would steal if an opportunity offered, or do any thing else no matter how bad. Make it a rule then, my dear boys, on all occasions, and under all circumstauces to tell the truth, and nothing but the truth, although it may be against your interest, and even subject you to punishment at the last, it would be greatly to your interest to do so. A boy that is known to be a truth-loving and truth-telling boy, will be loved and respected by all—all will put confidence in him, and depend upon his word in all cases, but a boy that will tell lies, will be despised by all who know him, and no one will believe what he says. Now, which of these characters would you prefer? I know you will say the boy that tells the truth. Well I hope you will always do what you approve of in others.

Sometimes boys will not hesitate to tell what they are pleased to call *innocent* falsehoods, or they think it is no harm to tell lies in jest. But let me assure you that there is no such thing as an *innocent* falsehood—all falsehood is wrong, and leads to great wickedness; and a boy that will tell a lie even in *jest* will soon learn to tell lies in *earnest*. This is the way a great many boys learn to tell lies—they will tell them in jest, thinking there is no harm.

I have known some boys who thought it was no harm to tell a falsehood, provided it would never be found out on them. But this is a great mistake. By this means they will acquire the habit of telling lies, and the sin is the same, whether it is found out or not. Besides, boys should remember that, although it might never be found out by any of their fellow creatures, yet God knows it, and will certainly hold them guilty.

And now, my boys, if you wish to become great, and wise, and good, never vary from the truth—never tell a falsehood, on any account. If you indulge in this bad habit, it would be in vain for me, or any one else, to try to make anything of you. This is the first bad habit that you must get rid of, or you will never become useful or honored, or respected in the world. A regard for truth is the foundation on which all other good qualities must be built.

I hope now from what I have said, that you will never lie, or deceive, or misrepresent a thing in any way, but at all times tell the truth.

This would be noble and magnanimous, and you would certainly gain the approbation of all good people.

Yours truly,

GRANDPA.